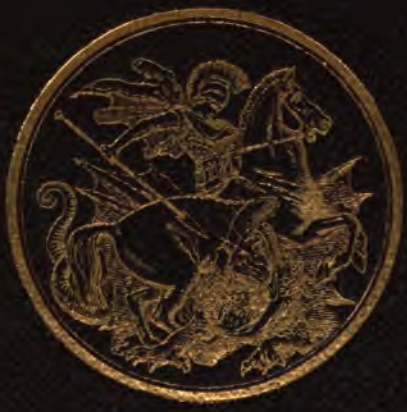

A

SUPPLEMENTARY CATALOGUE

OF THE

Pathological Museum

OF

ST. GEORGE'S HOSPITAL:

A DESCRIPTION OF THE SPECIMENS ADDED DURING THE YEARS 1866—1881.

BY

ISAMBARD OWEN, M.D.,

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LONDON:

J. & A. CHURCHILL, 11, NEW BURLINGTON STREET.

1882.

T. RICHARDS, PRINTER, 37, GREAT QUEEN STREET.

CONTENTS.

PREFACE.

THE Pathological Preparations described in the following pages were added to the Museum of St. George's Hospital during the years 1866-1881 by Mr. T. P. Pick, Dr. Whipham, Mr. Haward, Dr. Robert Lee, Dr. Ewart, and the present writer, who filled in succession the office of Curator.

The descriptions are based upon those given in the manuscript catalogue kept by the Curators, but to ensure the uniformity of method and style essential to the utility of the work, they have been, in every case, re-written from an examination of the actual specimen, and the clinical details abstracted afresh from the records to which references are given. The accounts of microscopical appearances are, however, for the most part, reproduced directly.

References are given to the *Transactions* of various Societies, to the Registrars' records of *Medical* and *Surgical Cases* preserved in St. George's Hospital, and to the *Post-mortem and Case Books* of the same Hospital, which may be consulted in the Museum. The last-mentioned series of records contain the Curators' accounts of post-mortem appearances, coupled with clinical abstracts furnished by the Registrars.

I have much pleasure in acknowledging the invaluable assistance afforded me in revising the proofs of this work by Mr. Clinton T. Dent, and by Dr. A. T. Myers.

ISAMBARD OWEN.

The Museum,
St. George's Hospital,
August 1, 1882.

THE first descriptive Catalogue of the Museum of St. George's Hospital, published in 1866, follows the then existing arrangement of the Museum.

When, in 1881, it was resolved to publish descriptions of the Preparations added since 1866, it was found desirable at the same time to rearrange the whole collection.

It was important that the Catalogue of 1866 should not thereby be rendered useless.

To obviate this, the plan of a double system of numbering was adopted.

Each Preparation now bears a permanent **Index Number**, referring to the published Catalogues, and, in addition, a **Label** giving its position in the Museum.

The **Index Numbers** of the Preparations described in the Catalogue of 1865 are consecutive from 1 to 3402, in the order of that Catalogue, and the tables below will supply them to the published copies.

The subsequent additions, described in the following pages, are numbered in continuation from 3403 to 4284, and these numbers are given in the text.

Future additions, as made, will be numbered from 4285 upwards.

The **Index Number** of a Preparation is permanent, and will be retained by it unchanged, as long as the Preparation remains in the Museum.

The figures on the **Labels** indicate the position of the Preparations in the Museum according to the existing classification of the Collection; and are therefore liable to change on each rearrangement.

They are not given in the following pages.

A **Classified Catalogue**, corresponding to the Labels, and formed by pasting the printed slips into a scrap-book in the required order, is placed for use in the Museum.

A **Transfer Index** is at hand to give strangers consulting the Museum the Label corresponding to each Index-Number, and to each number in the first published Catalogue of 1866.

TABLE

SHOWING

THE PERMANENT INDEX-NUMBER

Affixed to each Specimen described in the Catalogue of 1866.

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES I.		SERIES I—*cont.*		SERIES I—*cont.*	
1	1	29	29	57	57
2	2	30	30	58	58
3	3	31	31	59	59
4	4	32	32	60	60
5	5	33	33	61	61
6	6	34	34	62	62
7	7	35	35	63	63
8	8	36	36	64	64
9	9	37	37	65	65
10	10	38	38	66	66
11	11	39	39	67	67
12	12	40	40	68	68
13	13	41	41	69	69
14	14	42	42	70	70
15	15	43	43	71	71
16	16	44	44	72	72
17	17	45	45	73	73
18	18	46	46	74	74
19	19	47	47	75	75
20	20	48	48	76	76
21	21	49	49	77	77
22	22	50	50	78	78
23	23	51	51	79	79
24	24	52	52	80	80
25	25	53	53	81	81
26	26	54	54	82	82
27	27	55	55	83	83
28	28	56	56	84	84

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES I—*cont.*		SERIES I—*cont.*		SERIES I—*cont.*	
85	85	127	127	169	169
86	86	128	128	170	170
87	87	129	129	171	171
88	88	130	130	172	172
89	89	131	131	173	173
90	90	132	132	174	174
91	91	133	133	175	175
92	92	134	134	176	176
93	93	135	135	177	177
94	94	136	136	178	178
95	95	137	137	179	179
96	96	138	138	180	180
97	97	139	139	181	181
98	98	140	140	182	182
99	99	141	141	183	183
100	100	142	142	184	184
101	101	143	143	185	185
102	102	144	144	186	186
103	103	145	145	187	187
104	104	146	146	188	188
105	105	147	147	189	189
106	106	148	148	190	190
107	107	149	149	191	191
108	108	150	150	192	192
109	109	151	151	193	193
110	110	152	152	194	194
111	111	153	153	195	195
112	112	154	154	196	196
113	113	155	155	197	197
114	114	156	156	198	198
115	115	157	157	*199	199
116	116	158	158	200	200
117	117	159	159	201	201
118	118	160	160	202	202
119	119	161	161	203	203
120	120	162	162	204	204
121	121	163	163	205	205
122	122	164	164	206	206
123	123	165	165	207	207
124	124	166	166	208	208
125	125	167	167	209	209
126	126	168	168	210	210

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES I—*cont.*		SERIES II—*cont.*		SERIES II—*cont.*	
211	211	9	251	51	293
212	212	10	252	52	294
213	213	11	253	53	295
214	214	12	254	54	296
215	215	13	255	55	297
216	216	14	256	56	298
217	217	15	257	57	299
218	218	16	258	58	300
219	219	17	259	59	301
220	220	18	260	60	302
221	221	19	261	61	303
222	222	20	262	62	304
223	223	21	263	63	305
224	224	22	264	64	306
225	225	23	265	65	307
226	226	24	266	66	308
227	227	25	267	67	309
228	228	26	268	68	310
229	229	27	269	69	311
230	230	28	270	70	312
231	231	29	271	71	313
232	232	30	272	72	314
233	233	31	273	73	315
234	234	32	274	74	316
235	235	33	275	75	317
236	236	34	276	76	318
237	237	35	277	77	319
238	238	36	278	78	320
239	239	37	279	79	321
240	240	38	280	80	322
241	241	39	281	81	323
242	242	40	282	82	324
		41	283	83	325
SERIES II.		42	284	84	326
1	243	43	285	85	327
2	244	44	286	86	328
3	245	45	287	87	329
4	246	46	288	88	330
5	247	47	289	89	331
6	248	48	290	90	332
7	249	49	291	91	333
8	250	50	292	92	334

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES II—*cont.*		SERIES II—*cont.*		SERIES II—*cont.*	
93	335	135	377	177	419
94	336	136	378	178	420
95	337	137	379	179	421
96	338	138	380	180	422
97	339	139	381	181	423
98	340	140	382	182	424
99	341	141	383	183	425
100	342	142	384	184	426
101	343	143	385	185	427
102	344	144	386	186	428
103	345	145	387	187	429
104	346	146	388	188	430
105	347	147	389	189	431
106	348	148	390	190	432
107	349	149	391	191	433
108	350	150	392	192	434
109	351	151	393	193	435
110	352	152	394	194	436
111	353	153	395	195	437
112	354	154	396	196	438
113	355	155	397	197	439
114	356	156	398	198	440
115	357	157	399	199	441
116	358	158	400	200	442
117	359	159	401	201	443
118	360	160	402	202	444
119	361	161	403	203	445
120	362	162	404	204	446
121	363	163	405	205	447
122	364	164	406	206	448
123	365	165	407	207	449
124	366	166	408	208	450
125	367	167	409	209	451
126	368	168	410	210	452
127	369	169	411	211	453
128	370	170	412	212	454
129	371	171	413	213	455
130	372	172	414	214	456
131	373	173	415	215	457
132	374	174	416	216	458
133	375	175	417	217	459
134	376	176	418	218	460

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES II—*cont.*		SERIES III—*cont.*		SERIES III—*cont.*	
219	461	9	501	51	543
220	462	10	502	52	544
221	463	11	503	53	545
222	464	12	504	54	546
223	465	13	505	55	547
224	466	14	506	56	548
225	467	15	507	57	549
226	468	16	508	58	550
227	469	17	509	59	551
228	470	18	510	60	552
229	471	19	511	61	553
230	472	20	512	62	554
231	473	21	513	63	555
232	474	22	514	64	556
233	475	23	515	65	557
234	476	24	516	66	558
235	477	25	517	67	559
236	478	26	518	68	560
237	479	27	519	69	561
238	480	28	520	70	562
239	481	29	521	71	563
240	482	30	522	72	564
241	483	31	523	73	565
242	484	32	524	74	566
243	485	33	525	75	567
244	486	34	526	76	568
245	487	35	527	77	569
246	488	36	528	78	570
247	489	37	529	79	571
248	490	38	530	80	572
249	491	39	531	81	573
250	492	40	532	82	574
		41	533	83	575
SERIES III.		42	534	84	576
1	493	43	535	85	577
2	494	44	536	86	578
3	495	45	537	87	579
4	496	46	538	88	580
5	497	47	539	89	581
6	498	48	540	90	582
7	499	49	541	91	583
8	500	50	542	92	584

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES III—*cont.*		SERIES III—*cont.*		SERIES V—*cont.*	
93	585	135	627	3	665
94	586	136	628	4	666
95	587	137	629	5	667
96	588	138	630	6	668
97	589	139	631	7	669
98	590	140	632	8	670
99	591	141	633	9	671
100	592	142	634	10	672
101	593	143	635	11	673
102	594	144	636	12	674
103	595	145	637	13	675
104	596	146	638	14	676
105	597	147	639	15	677
106	598	148	640	16	678
107	599	149	641	17	679
108	600	150	642	18	680
109	601			19	681
110	602	SERIES IV.		20	682
111	603	1	643	21	683
112	604	2	644	22	684
113	605	3	645	23	685
114	606	4	646	24	686
115	607	5	647	25	687
116	608	6	648	26	688
117	609	7	649	27	689
118	610	8	650	28	690
119	611	9	651	29	691
120	612	10	652	30	692
121	613	11	653	31	693
122	614	12	654	32	694
123	615	13	655	33	695
124	616	14	656	34	696
125	617	15	657	35	697
126	618	16	658	36	698
127	619	17	659	37	699
128	620	18	660	38	700
129	621	19	661	39	701
130	622	20	662	40	702
131	623			41	703
132	624	SERIES V.		42	704
133	625	1	663	43	705
134	626	2	664	44	706

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES V—*cont.*		SERIES VI—*cont.*		SERIES VI—*cont.*	
45	707	30	747	72	789
46	708	31	748	73	790
47	709	32	749	74	791
48	710	33	750	75	792
49	711	34	751	76	793
50	712	35	752	77	794
51	713	36	753	78	795
52	714	37	754	79	796
53	715	38	755	80	797
54	716	39	756	81	798
55	717	40	757	82	799
		41	758	83	800
SERIES VI.		42	759	84	801
1	718	43	760	85	802
2	719	44	761	86	803
3	720	45	762	87	804
4	721	46	763	88	805
5	722	47	764	89	806
6	723	48	765	90	807
7	724	49	766	91	808
8	725	50	767	92	809
9	726	51	768	93	810
10	727	52	769	94	811
11	728	53	770	95	812
12	729	54	771	96	813
13	730	55	772	97	814
14	731	56	773	98	815
15	732	57	774	99	816
16	733	58	775	100	817
17	734	59	776	101	818
18	735	60	777	102	819
19	736	61	778	103	820
20	737	62	779	104	821
21	738	63	780	105	822
22	739	64	781	106	823
23	740	65	782	107	824
24	741	66	783	108	825
25	742	67	784	109	826
26	743	68	785	110	827
27	744	69	786	111	828
28	745	70	787	112	829
29	746	71	788	113	830

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES VI—*cont.*		SERIES VI—*cont.*		SERIES VI—*cont.*	
114	831	156	873	198	915
115	832	157	874	199	916
116	833	158	875	200	917
117	834	159	876	201	918
118	835	160	877	202	919
119	836	161	878	203	920
120	837	162	879	204	921
121	838	163	880	205	922
122	839	164	881	206	923
123	840	165	882	207	924
124	841	166	883	208	925
125	842	167	884	209	926
126	843	168	885	210	927
127	844	169	886	211	928
128	845	170	887	212	929
129	846	171	888	213	930
130	847	172	889	214	931
131	848	173	890	215	932
132	849	174	891	216	933
133	850	175	892	217	934
134	851	176	893	218	935
135	852	177	894	219	936
136	853	178	895		
137	854	179	896	SERIES VII.	
138	855	180	897	1	937
139	856	181	898	2	938
140	857	182	899	3	939
141	858	183	900	4	940
142	859	184	901	5	941
143	860	185	902	6	942
144	861	186	903	7	943
145	862	187	904	8	944
146	863	188	905	9	945
147	864	189	906	10	946
148	865	190	907	11	947
149	866	191	908	12	948
150	867	192	909	13	949
151	868	193	910	14	950
152	869	194	911	15	951
153	870	195	912	16	952
154	871	196	913	17	953
155	872	197	914	18	954

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES VII—*cont.*		SERIES VII—*cont.*		SERIES VII—*cont.*	
19	955	61	997	103	1039
20	956	62	998	104	1040
21	957	63	999	105	1041
22	958	64	1000	106	1042
23	959	65	1001	107	1043
24	960	66	1002	108	1044
25	961	67	1003	109	1045
26	962	68	1004	110	1046
27	963	69	1005	111	1047
28	964	70	1006	112	1048
29	965	71	1007	113	1049
30	966	72	1008	114	1050
31	967	73	1009	115	1051
32	968	74	1010	116	1052
33	969	75	1011	117	1053
34	970	76	1012	118	1054
35	971	77	1013	119	1055
36	972	78	1014	120	1056
37	973	79	1015	121	1057
38	974	80	1016	122	1058
39	975	81	1017	123	1059
40	976	82	1018		
41	977	83	1019	SERIES VIII.	
42	978	84	1020	1	1060
43	979	85	1021	2	1061
44	980	86	1022	3	1062
45	981	87	1023	4	1063
46	982	88	1024	5	1064
47	983	89	1025	6	1065
48	984	90	1026	7	1066
49	985	91	1027	8	1067
50	986	92	1028	9	1068
51	987	93	1029	10	1069
52	988	94	1030	11	1070
53	989	95	1031	12	1071
54	990	96	1032	13	1072
55	991	97	1033	14	1073
56	992	98	1034	15	1074
57	993	99	1035	16	1075
58	994	100	1036	17	1076
59	995	101	1037	18	1077
60	996	102	1038	19	1078

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES VIII—*cont.*		SERIES VIII—*cont.*		SERIES VIII—*cont.*	
20	1079	62	1121	104	1163
21	1080	63	1122	105	1164
22	1081	64	1123	106	1165
23	1082	65	1124	107	1166
24	1083	66	1125	108	1167
25	1084	67	1126	109	1168
26	1085	68	1127	110	1169
27	1086	69	1128	111	1170
28	1087	70	1129	112	1171
29	1088	71	1130	113	1172
30	1089	72	1131	114	1173
31	1090	73	1132	115	1174
32	1091	74	1133	116	1175
33	1092	75	1134	117	1176
34	1093	76	1135	118	1177
35	1094	77	1136	119	1178
36	1095	78	1137	120	1179
37	1096	79	1138	121	1180
38	1097	80	1139	122	1181
39	1098	81	1140	123	1182
40	1099	82	1141	124	1183
41	1100	83	1142	125	1184
42	1101	84	1143	126	1185
43	1102	85	1144	127	1186
44	1103	86	1145	128	1187
45	1104	87	1146	129	1188
46	1105	88	1147	130	1189
47	1106	89	1148	131	1190
48	1107	90	1149	132	1191
49	1108	91	1150	133	1192
50	1109	92	1151	134	1193
51	1110	93	1152	135	1194
52	1111	94	1153	136	1195
53	1112	95	1154	137	1196
54	1113	96	1155	138	1197
55	1114	97	1156	139	1198
56	1115	98	1157	140	1199
57	1116	99	1158	141	1200
58	1117	100	1159	142	1201
59	1118	101	1160	143	1202
60	1119	102	1161	144	1203
61	1120	103	1162	145	1204

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES VIII—*cont.*		SERIES VIII—*cont.*		SERIES IX—*cont.*	
146	1205	188	1247	38	1287
147	1206	189	1248	39	1288
148	1207	190	1249	40	1289
149	1208			41	1290
150	1209	SERIES IX.		42	1291
151	1210	1	1250	43	1292
152	1211	2	1251	44	1293
153	1212	3	1252	45	1294
154	1213	4	1253	46	1295
155	1214	5	1254	47	1296
156	1215	6	1255	48	1297
157	1216	7	1256	49	1298
158	1217	8	1257	50	1299
159	1218	9	1258	51	1300
160	1219	10	1259	52	1301
161	1220	11	1260	53	1302
162	1221	12	1261	54	1303
163	1222	13	1262	55	1304
164	1223	14	1263	56	1305
165	1224	15	1264	57	1306
166	1225	16	1265	58	1307
167	1226	17	1266	59	1308
168	1227	18	1267	60	1309
169	1228	19	1268	61	1310
170	1229	20	1269	62	1311
171	1230	21	1270	63	1312
172	1231	22	1271	64	1313
173	1232	23	1272	65	1314
174	1233	24	1273	66	1315
175	1234	25	1274	67	1316
176	1235	26	1275	68	1317
177	1236	27	1276	69	1318
178	1237	28	1277	70	1319
179	1238	29	1278	71	1320
180	1239	30	1279	72	1321
181	1240	31	1280	73	1322
182	1241	32	1281	74	1323
183	1242	33	1282	75	1324
184	1243	34	1283	76	1325
185	1244	35	1284	77	1326
186	1245	36	1285	78	1327
187	1246	37	1286	79	1328

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
Series IX—*cont.*		Series IX—*cont.*		Series IX—*cont.*	
80	1329	122	1371	164	1413
81	1330	123	1372	165	1414
82	1331	124	1373	166	1415
83	1332	125	1374	167	1416
84	1333	126	1375	168	1417
85	1334	127	1376	169	1418
86	1335	128	1377	170	1419
87	1336	129	1378	171	1420
88	1337	130	1379	172	1421
89	1338	131	1380	173	1422
90	1339	132	1381	174	1423
91	1340	133	1382	175	1424
92	1341	134	1383	176	1425
93	1342	135	1384	177	1426
94	1343	136	1385	178	1427
95	1344	137	1386	179	1428
96	1345	138	1387	180	1429
97	1346	139	1388	181	1430
98	1347	140	1389	182	1431
99	1348	141	1390	183	1432
100	1349	142	1391	184	1433
101	1350	143	1392	185	1434
102	1351	144	1393	186	1435
103	1352	145	1394	187	1436
104	1353	146	1395	188	1437
105	1354	147	1396	189	1438
106	1355	148	1397	190	1439
107	1356	149	1398	191	1440
108	1357	150	1399	192	1441
109	1358	151	1400	193	1442
110	1359	152	1401	194	1443
111	1360	153	1402	195	1444
112	1361	154	1403	196	1445
113	1362	155	1404	197	1446
114	1363	156	1405	198	1447
115	1364	157	1406	199	1448
116	1365	158	1407	200	1449
117	1366	159	1408	201	1450
118	1367	160	1409	202	1451
119	1368	161	1410	203	1452
120	1369	162	1411	204	1453
121	1370	163	1412	205	1454

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES IX—*cont.*		SERIES IX—*cont.*		SERIES IX—*cont.*	
206	1455	248	1497	290	1539
207	1456	249	1498	291	1540
208	1457	250	1499	292	1541
209	1458	251	1500	293	1542
210	1459	252	1501	294	1543
211	1460	253	1502	295	1544
212	1461	254	1503	296	1545
213	1462	255	1504	297	1546
214	1463	256	1505	298	1547
215	1464	257	1506	299	1548
216	1465	258	1507	300	1549
217	1466	259	1508	301	1550
218	1467	260	1509	302	1551
219	1468	261	1510	303	1552
220	1469	262	1511	304	1553
221	1470	263	1512	305	1554
222	1471	264	1513	306	1555
223	1472	265	1514	307	1556
224	1473	266	1515	308	1557
225	1474	267	1516	309	1558
226	1475	268	1517	310	1559
227	1476	269	1518	311	1560
228	1477	270	1519	312	1561
229	1478	271	1520	313	1562
230	1479	272	1521	314	1563
231	1480	273	1522	315	1564
232	1481	274	1523	316	1565
233	1482	275	1524	317	1566
234	1483	276	1525	318	1567
235	1484	277	1526	319	1568
236	1485	278	1527	320	1569
237	1486	279	1528	321	1570
238	1487	280	1529	322	1571
239	1488	281	1530	323	1572
240	1489	282	1531	324	1573
241	1490	283	1532	325	1574
242	1491	284	1533	326	1575
243	1492	285	1534	327	1576
244	1493	286	1535	328	1577
245	1494	287	1536	329	1578
246	1495	288	1537	330	1579
247	1496	289	1538	331	1580

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES IX—*cont.*	
332	1581
333	1582
334	1583
335	1584
336	1585
337	1586
338	1587
339	1588
340	1589
341	1590
342	1591
343	1592
344	1593
345	1594
SERIES X.	
1	1595
2	1596
3	1597
4	1598
5	1599
6	1600
7	1601
8	1602
9	1603
10	1604
11	1605
12	1606
13	1607
14	1608
15	1609
16	1610
17	1611
18	1612
19	1613
20	1614
21	1615
22	1616
23	1617
24	1618
25	1619
26	1620

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES X—*cont.*	
27	1621
28	1622
29	1623
30	1624
31	1625
32	1626
33	1627
34	1628
35	1629
36	1630
37	1631
38	1632
39	1633
40	1634
41	1635
42	1636
43	1637
44	1638
45	1639
46	1640
47	1641
48	1642
49	1643
50	1644
51	1645
52	1646
53	1647
54	1648
55	1649
56	1650
57	1651
58	1652
59	1653
SERIES XI.	
1	1654
2	1655
3	1656
4	1657
5	1658
6	1659
7	1660

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XI—*cont.*	
8	1661
9	1662
10	1663
11	1664
12	1665
13	1666
14	1667
15	1668
16	1669
17	1670
18	1671
19	1672
20	1673
21	1674
22	1675
23	1676
24	1677
25	1678
26	1679
27	1680
28	1681
29	1682
30	1683
31	1684
32	1685
33	1686
34	1687
35	1688
36	1689
37	1690
38	1691
39	1692
40	1693
41	1694
42	1695
43	1696
44	1697
45	1698
46	1699
47	1700
48	1701
49	1702

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XI—*cont.*		SERIES XII—*cont.*		SERIES XII—*cont.*	
50	1703	29	1743	71	1785
51	1704	30	1744	72	1786
52	1705	31	1745	73	1787
53	1706	32	1746	74	1788
54	1707	33	1747	75	1789
55	1708	34	1748	76	1790
56	1709	35	1749	77	1791
57	1710	36	1750	78	1792
58	1711	37	1751	79	1793
59	1712	38	1752	80	1794
60	1713	39	1753	81	1795
61	1714	40	1754	82	1796
		41	1755	83	1797
SERIES XII.		42	1756	84	1798
1	1715	43	1757	85	1799
2	1716	44	1758	86	1800
3	1717	45	1759	87	1801
4	1718	46	1760	88	1802
5	1719	47	1761	89	1803
6	1720	48	1762	90	1804
7	1721	49	1763	91	1805
8	1722	50	1764	92	1806
9	1723	51	1765	93	1807
10	1724	52	1766	94	1808
11	1725	53	1767	95	1809
12	1726	54	1768	96	1810
13	1727	55	1769	97	1811
14	1728	56	1770	98	1812
15	1729	57	1771	99	1813
16	1730	58	1772	100	1814
17	1731	59	1773	101	1815
18	1732	60	1774	102	1816
19	1733	61	1775	103	1817
20	1734	62	1776	104	1818
21	1735	63	1777	105	1819
22	1736	64	1778	106	1820
23	1737	65	1779	107	1821
24	1738	66	1780	108	1822
25	1739	67	1781	109	1823
26	1740	68	1782	110	1824
27	1741	69	1783	111	1825
28	1742	70	1784	112	1826

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XII—*cont.*		SERIES XIII—*cont.*		SERIES XIII—*cont.*	
113	1827	38	1867	80	1909
114	1828	39	1868	81	1910
115	1829	40	1869	82	1911
		41	1870	83	1912
SERIES XIII.		42	1871	84	1913
1	1830	43	1872	85	1914
2	1831	44	1873	86	1915
3	1832	45	1874	87	1916
4	1833	46	1875	88	1917
5	1834	47	1876	89	1918
6	1835	48	1877	90	1919
7	1836	49	1878	91	1920
8	1837	50	1879	92	1921
9	1838	51	1880	93	1922
10	1839	52	1881	94	1923
11	1840	53	1882	95	1924
12	1841	54	1883	96	1925
13	1842	55	1884	97	1926
14	1843	56	1885	98	1927
15	1844	57	1886	99	1928
16	1845	58	1887		
17	1846	59	1888	SERIES XIV.	
18	1847	60	1889	1	1929
19	1848	61	1890	2	1930
20	1849	62	1891	3	1931
21	1850	63	1892	4	1932
22	1851	64	1893	5	1933
23	1852	65	1894	6	1934
24	1853	66	1895	7	1935
25	1854	67	1896	8	1936
26	1855	68	1897	9	1937
27	1856	69	1898	10	1938
28	1857	70	1899	11	1939
29	1858	71	1900	12	1940
30	1859	72	1901	13	1941
31	1860	73	1902	14	1942
32	1861	74	1903	15	1943
33	1862	75	1904	16	1944
34	1863	76	1905	17	1945
35	1864	77	1906	18	1946
36	1865	78	1907	19	1947
37	1866	79	1908	20	1948

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIV—*cont.*		SERIES XIV—*cont.*		SERIES XIV—*cont.*	
21	1949	63	1991	105	2033
22	1950	64	1992	106	2034
23	1951	65	1993	107	2035
24	1952	66	1994	108	2036
25	1953	67	1995	109	2037
26	1954	68	1996	110	2038
27	1955	69	1997	111	2039
28	1956	70	1998	112	2040
29	1957	71	1999	113	2041
30	1958	72	2000	114	2042
31	1959	73	2001	115	2043
32	1960	74	2002	116	2044
33	1961	75	2003	117	2045
34	1962	76	2004	118	2046
35	1963	77	2005	119	2047
36	1964	78	2006	120	2048
37	1965	79	2007	121	2049
38	1966	80	2008	122	2050
39	1967	81	2009	123	2051
40	1968	82	2010	124	2052
41	1969	83	2011	125	2053
42	1970	84	2012	126	2054
43	1971	85	2013	127	2055
44	1972	86	2014	128	2056
45	1973	87	2015	129	2057
46	1974	88	2016	130	2058
47	1975	89	2017	131	2059
48	1976	90	2018	132	2060
49	1977	91	2019	133	2061
50	1978	92	2020	134	2062
51	1979	93	2021	135	2063
52	1980	94	2022	136	2064
53	1981	95	2023	137	2065
54	1982	96	2024	138	2066
55	1983	97	2025	139	2067
56	1984	98	2026	140	2068
57	1985	99	2027	141	2069
58	1986	100	2028	142	2070
59	1987	101	2029	143	2071
60	1988	102	2030	144	2072
61	1989	103	2031	145	2073
62	1990	104	2032	146	2074

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIV—*cont.*	
147	2075
148	2076
149	2077
150	2078
151	2079
152	2080
153	2081
154	2082
SERIES XV.	
1	2083
2	2084
3	2085
4	2086
5	2087
6	2088
7	2089
8	2090
9	2091
10	2092
11	2093
12	2094
13	2095
14	2096
15	2097
16	2098
17	2099
18	2100
19	2101
20	2102
21	2103
22	2104
23	2105
24	2106
25	2107
26	2108
27	2109
28	2110
29	2111
30	2112
31	2113
32	2114

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XV—*cont.*	
33	2115
34	2116
35	2117
36	2118
37	2119
38	2120
39	2121
40	2122
41	2123
42	2124
43	2125
44	2126
45	2127
46	2128
47	2129
48	2130
49	2131
50	2132
SERIES XVI.	
1	2133
2	2134
3	2135
4	2136
5	2137
6	2138
7	2139
8	2140
9	2141
10	2142
11	2143
12	2144
13	2145
14	2146
15	2147
16	2148
17	2149
18	2150
19	2151
20	2152
21	2153
22	2154

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XVI—*cont.*	
23	2155
24	2156
25	2157
26	2158
27	2159
28	2160
29	2161
30	2162
31	2163
32	2164
33	2165
34	2166
35	2167
36	2168
37	2169
38	2170
39	2171
40	2172
41	2173
42	2174
43	2175
44	2176
45	2177
46	2178
47	2179
48	2180
49	2181
50	2182
51	2183
52	2184
53	2185
54	2186
55	2187
56	2188
57	2189
58	2190
59	2191
60	2192
61	2193
62	2194
63	2195
64	2196

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XVI—*cont.*		SER. XVII—*cont.*		SER. XVII—*cont.*	
65	2197	3	2237	45	2279
66	2198	4	2238	46	2280
67	2199	5	2239	47	2281
68	2200	6	2240	48	2282
69	2201	7	2241	49	2283
70	2202	8	2242	50	2284
71	2203	9	2243	51	2285
72	2204	10	2244	52	2286
73	2205	11	2245	53	2287
74	2206	12	2246	54	2288
75	2207	13	2247	55	2289
76	2208	14	2248	56	2290
77	2209	15	2249	57	2291
78	2210	16	2250	58	2292
79	2211	17	2251	59	2293
80	2212	18	2252	60	2294
81	2213	19	2253	61	2295
82	2214	20	2254	62	2296
83	2215	21	2255	63	2297
84	2216	22	2256	64	2298
85	2217	23	2257	65	2299
86	2218	24	2258	66	2300
87	2219	25	2259	67	2301
88	2220	26	2260	68	2302
89	2221	27	2261	69	2303
90	2222	28	2262	70	2304
91	2223	29	2263	71	2305
92	2224	30	2264	72	2306
93	2225	31	2265	73	2307
94	2226	32	2266	74	2308
95	2227	33	2267	75	2309
96	2228	34	2268	76	2310
97	2229	35	2269	77	2311
98	2230	36	2270	78	2312
99	2231	37	2271	79	2313
100	2232	38	2272	80	2314
101	2233	39	2273	81	2315
102	2234	40	2274	82	2316
		41	2275	83	2317
SERIES XVII.		42	2276	84	2318
1	2235	43	2277	85	2319
2	2236	44	2278	86	2320

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SER. XVII—*cont.*		SER. XVIII—*cont.*		SER. XVIII—*cont.*	
87	2321	20	2361	62	2403
88	2322	21	2362	63	2404
89	2323	22	2363	64	2405
90	2324	23	2364		
91	2325	24	2365	SERIES XIX.	
92	2326	25	2366	1	2406
93	2327	26	2367	2	2407
94	2328	27	2368	3	2408
95	2329	28	2369	4	2409
96	2330	29	2370	5	2410
97	2331	30	2371	6	2411
98	2332	31	2372	7	2412
99	2333	32	2373	8	2413
100	2334	33	2374	9	2414
101	2335	34	2375	10	2415
102	2336	35	2376	11	2416
103	2337	36	2377	12	2417
104	2338	37	2378	13	2418
105	2339	38	2379	14	2419
106	2340	39	2380	15	2420
107	2341	40	2381	16	2421
		41	2382	17	2422
SER. XVIII.		42	2383	18	2423
1	2342	43	2384	19	2424
2	2343	44	2385	20	2425
3	2344	45	2386	21	2426
4	2345	46	2387	22	2427
5	2346	47	2388	23	2428
6	2347	48	2389	24	2429
7	2348	49	2390	25	2430
8	2349	50	2391	26	2431
9	2350	51	2392	27	2432
10	2351	52	2393	28	2433
11	2352	53	2394	29	2434
12	2353	54	2395	30	2435
13	2354	55	2396	31	2436
14	2355	56	2397	32	2437
15	2356	57	2398	33	2438
16	2357	58	2399	34	2439
17	2358	59	2400	35	2440
18	2359	60	2401	36	2441
19	2360	61	2402	37	2442

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIX—*cont.*		SERIES XIX—*cont.*		SERIES XIX—*cont.*	
38	2443	80	2485	122	2527
39	2444	81	2486	123	2528
40	2445	82	2487	124	2529
41	2446	83	2488	125	2530
42	2447	84	2489	126	2531
43	2448	85	2490	127	2532
44	2449	86	2491	128	2533
45	2450	87	2492	129	2534
46	2451	88	2493	130	2535
47	2452	89	2494	131	2536
48	2453	90	2495	132	2537
49	2454	91	2496	133	2538
50	2455	92	2497	134	2539
51	2456	93	2498	135	2540
52	2457	94	2499	136	2541
53	2458	95	2500	137	2542
54	2459	96	2501	138	2543
55	2460	97	2502	139	2544
56	2461	98	2503	140	2545
57	2462	99	2504	141	2546
58	2463	100	2505	142	2547
59	2464	101	2506	143	2548
60	2465	102	2507	144	2549
61	2466	103	2508	145	2550
62	2467	104	2509	146	2551
63	2468	105	2510	147	2552
64	2469	106	2511	148	2553
65	2470	107	2512	149	2554
66	2471	108	2513	150	2555
67	2472	109	2514	151	2556
68	2473	110	2515	152	2557
69	2474	111	2516	153	2558
70	2475	112	2517	154	2559
71	2476	113	2518	155	2560
72	2477	114	2519	156	2561
73	2478	115	2520	157	2562
74	2479	116	2521	158	2563
75	2480	117	2522	159	2564
76	2481	118	2523	160	2565
77	2482	119	2524	161	2566
78	2483	120	2525	162	2567
79	2484	121	2526	163	2568

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIX—*cont.*		SERIES XIX—*cont.*		SERIES XIX—*cont.*	
164	2569	206	2611	248	2653
165	2570	207	2612	249	2654
166	2571	208	2613	250	2655
167	2572	209	2614	251	2656
168	2573	210	2615	252	2657
169	2574	211	2616	253	2658
170	2575	212	2617	254	2659
171	2576	213	2618	255	2660
172	2577	214	2619	256	2661
173	2578	215	2620	257	2662
174	2579	216	2621	258	2663
175	2580	217	2622	259	2664
176	2581	218	2623	260	2665
177	2582	219	2624	261	2666
178	2583	220	2625	262	2667
179	2584	221	2626	263	2668
180	2585	222	2627	264	2669
181	2586	223	2628	265	2670
182	2587	224	2629	266	2671
183	2588	225	2630	267	2672
184	2589	226	2631	268	2673
185	2590	227	2632	269	2674
186	2591	228	2633	270	2675
187	2592	229	2634	271	2676
188	2593	230	2635	272	2677
189	2594	231	2636	273	2678
190	2595	232	2637	274	2679
191	2596	233	2638	275	2680
192	2597	234	2639	276	2681
193	2598	235	2640	277	2682
194	2599	236	2641	278	2683
195	2600	237	2642	279	2684
196	2601	238	2643	280	2685
197	2602	239	2644	281	2686
198	2603	240	2645	282	2687
199	2604	241	2646	283	2688
200	2605	242	2647	284	2689
201	2606	243	2648	285	2690
202	2607	244	2649	286	2691
203	2608	245	2650	287	2692
204	2609	246	2651	288	2693
205	2610	247	2652	289	2694

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIX—*cont.*		SERIES XIX—*cont.*		SERIES XIX—*cont.*	
290	2695	332	2737	374	2779
291	2696	333	2738	375	2780
292	2697	334	2739	376	2781
293	2698	335	2740	377	2782
294	2699	336	2741	378	2783
295	2700	337	2742	379	2784
296	2701	338	2743	380	2785
297	2702	339	2744	381	2786
298	2703	340	2745	382	2787
299	2704	341	2746	383	2788
300	2705	342	2747	384	2789
301	2706	343	2748	385	2790
302	2707	344	2749	386	2791
303	2708	345	2750	387	2792
304	2709	346	2751	388	2793
305	2710	347	2752	389	2794
306	2711	348	2753	390	2795
307	2712	349	2754	391	2796
308	2713	350	2755	392	2797
309	2714	351	2756	393	2798
310	2715	352	2757	394	2799
311	2716	353	2758	395	2800
312	2717	354	2759	396	2801
313	2718	355	2760	397	2802
314	2719	356	2761	398	2803
315	2720	357	2762	399	2804
316	2721	358	2763	400	2305
317	2722	359	2764	401	2806
318	2723	360	2765	402	2807
319	2724	361	2766	403	2808
320	2725	362	2767	404	2809
321	2726	363	2768	405	2810
322	2727	364	2769	406	2811
323	2728	365	2770	407	2812
324	2729	366	2771	408	2813
325	2730	367	2772	409	2814
326	2731	368	2773	410	2815
327	2732	369	2774	411	2816
328	2733	370	2775	412	2817
329	2734	371	2776	413	2818
330	2735	372	2777	414	2819
331	2736	373	2778	415	2820

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XIX—*cont.*	
416	2821
417	2822
418	2823
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457	2862
SERIES XIX—*cont.*	
458	2863
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SERIES XX.	
1	2895
2	2896
3	2897
4	2898
5	2899
6	2900
7	2901
8	2902
SERIES XX—*cont.*	
9	2903
10	2904
11	2905
12	2906
13	2907
14	2908
15	2909
16	2910
17	2911
18	2912
19	2913
SERIES XXI.	
1	2914
2	2915
3	2916
4	2917
5	2918
6	2919
7	2920
8	2921
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Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XXI—*cont.*		SERIES XXI—*cont.*		SERIES XXI—*cont.*	
30	2943	71	2985	112	3027
31	2944	72	2986	113	3028
32	2945	73	2987	114	3029
33	2946	74	2988	115	3030
34	2947	75	2989	116	3031
35	2948	76	2990	117	3032
36	2949	77	2991	118	3033
37	2950	78	2992	119	3034
38	2951	79	2993	120	3035
39	2952	80	2994	121	3036
40	2953	81	2995	122	3037
41	2954	82	2996	123	3038
42	2955	83	2997	124	3039
43	2956	84	2998	125	3040
44	2957	85	2999	126	3041
45	2958	85 *a*	3000	126 *a*	3042
46	2959	86	3001	127	3043
47	2960	87	3002	128	3044
48	2961	88	3003	129	3045
49	2962	89	3004	130	3046
50	2963	90	3005	131	3047
51	2964	91	3006	132	3048
52	2965	92	3007	133	3049
53	2966	93	3008	134	3050
54	2967	94	3009	135	3051
55	2968	95	3010	136	3052
56	2969	96	3011	137	3053
57	2970	97	3012	138	3054
58	2971	98	3013	139	3055
59	2972	99	3014	140	3056
60	2973	100	3015	141	3057
60 *a*	2974	101	3016	142	3058
61	2975	102	3017	143	3059
62	2976	103	3018	144	3060
63	2977	104	3019	145	3061
64	2978	105	3020	146	3062
65	2979	106	3021	147	3063
66	2980	107	3022	148	3064
67	2981	108	3023	148 *a*	3065
68	2982	109	3024	148 *b*	3066
69	2983	110	3025	149	3067
70	2984	111	3026	150	3068

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XXI—*cont.*		SERIES XXI—*cont.*		SER. XXII—*cont.*	
151	3069	191	3111	32	3151
152	3070	192	3112	33	3152
152 *a*	3071	193	3113	34	3153
153	3072	194	3114	35	3154
154	3073	195	3115	36	3155
155	3074	196	3116	37	3156
156	3075	197	3117	38	3157
157	3076			39	3158
158	3077	SER. XXII.		40	3159
159	3078	1	3118	41	3160
160	3079	2	3119	42	3161
161	3080	3	3120	43	3162
162	3081	4	3121	44	3163
163	3082	5	3122	45	3164
164	3083	6	3123	46	3165
165	3084	7	3124	47	3166
166	3085	8	3125	48	3167
167	3086	9	3126	49	3168
168	3087	10	3127	50	3169
169	3088	11	3128	51	3170
170	3089	12	3129	52	3171
171	3090	13	3130	53	3172
172	3091	13 *a*	3131	54	3173
173	3092	14	3132	55	3174
174	3093	14 *a*	3133	56	3175
175	3094	15	3134	57	3176
176	3095	16	3135	58	3177
177	3096	17	3136	59	3178
178	3097	18	3137	60	3179
179	3098	19	3138	61	3180
180	3099	20	3139	62	3181
181	3100	21	3140	63	3182
181 *a*	3101	22	3141	64	3183
182	3102	23	3142	65	3184
183	3103	24	3143	66	3185
184	3104	25	3144	67	3186
185	3105	26	3145	68	3187
186	3106	27	3146	69	3188
187	3107	28	3147	70	3189
188	3108	29	3148	71	3190
189	3109	30	3149	72	3191
190	3110	31	3150	73	3192

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XXII—*cont.*	
74	3193
75	3194
76	3195
77	3196
78	3197
79	3198
80	3199
81	3200
82	3201
83	3202
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102	3221
103	3222
104	3223
105	3224
106	3225
107	3226
108	3227
109	3228
110	3229
111	3230
112	3231
113	3232
114	3233
115	3234

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES XXII—*cont.*	
116	3235
117	3236
118	3237
119	3238
120	3239
121	3240
122	3241
123	3242
124	3243
125	3244
126	3245
127	3246
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APPENDIX.	
SERIES I.	
243	3247
244	3248
245	3249
246	3250
247	3251
248	3252
249	3253
250	3254
251	3255
252	3256
253	3257
254	3258
255	3259
256	3260
SERIES II.	
251	3261
252	3262
253	3263
254	3264
255	3265
256	3266
257	3267
258	3268

Number in Catalogue of 1866.	Permanent Index-Number.
SERIES II—*cont.*	
259	3269
260	3270
261	3271
262	3272
263	3273
264	3274
265	3275
266	3276
267	3277
268	3278
269	3279
270	3280
271	3281
272	3282
273	3283
274	3284
275	3285
SERIES III.	
151	3286
152	3287
153	3288
154	3289
155	3290
156	3291
157	3292
158	3293
159	3294
160	3295
161	3296
162	3297
SERIES IV.	
21	3298
SERIES V.	
56	3299
57	3300
58	3301
SERIES VI.	
220	3302

Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.	Number in Catalogue of 1866.	Permanent Index-Number.
SERIES VI—*cont.*		SERIES VII.		SERIES VIII—*cont.*	
221	3303	124	3338	220	3372
222	3304	125	3339	221	3373
223	3305	126	3340	222	3374
224	3306	127	3341	223	3375
225	3307	SERIES VIII.		224	3376
226	3308	190	3342	225	3377
227	3309	191	3343	226	3378
228	3310	192	3344	227	3379
229	3311	193	3345	228	3380
230	3312	194	3346	229	3381
231	3313	195	3347	230	3382
232	3314	196	3348	231	3383
233	3315	197	3349	232	3384
234	3316	198	3350	SERIES IX.	
235	3317	199	3351	346	3385
236	3318	200	3352	347	3386
237	3319	201	3353	348	3387
238	3320	202	3354	349	3388
239	3321	203	3355	350	3389
240	3322	204	3356	351	3390
241	3323	205	3357	352	3391
242	3324	206	3358	353	3392
243	3325	207	3359	354	3393
244	3326	208	3360	355	3394
245	3327	209	3361	356	3395
246	3328	210	3362	357	3396
247	3329	211	3363	358	3397
248	3330	212	3364	SERIES XI.	
249	3331	213	3365	62	3398
250	3332	214	3366	63	3399
251	3333	215	3367	SERIES XIV.	
252	3334	216	3368	154	3400
253	3335	217	3369	155	3401
254	3336	218	3370	156	3402
255	3337	219	3371		

In the following pages the Preparations are designated by their Index-numbers alone. The figures in small type are those by which they were designated in the Curators' Manuscript Catalogue, and are added merely for purposes of identification.

SPECIMENS

ADDED TO THE

MUSEUM OF ST. GEORGE'S HOSPITAL.

Dry Preparations are indicated by a marginal asterisk. (*).

I.

INJURIES OF BONE AND CARTILAGE.

3403. 257. * A portion of the Right Parietal Bone of the Skull, showing a Circular Hole, about half an inch in diameter. Its edges are tolerably sharp, and the inner table is destroyed to a greater extent than the outer.

The injury was produced by the sharp end of a small poker, which was thrown at the patient (a woman aged forty) by her husband. When she applied at the Liverpool Royal Infirmary, there was nothing visible, except a small contused wound. She did not again show herself for three days, during which she was in a state of almost constant intoxication. The wound then looked unhealthy, and the discharge was acrid and contained flakes of cerebral matter. Paralysis appeared on the fifth day, and on the tenth she died.

Pathological Society's Transactions, vol. xv, p. 188. *Presented by* Mr. BRAUNSTON NASH, of Liverpool.

3404. 23 *a*. * Portions of Bone removed from the Skull after a severe Compound Comminuted Fracture.

The boy from whom the specimen was taken, was brought into the Hospital on October 13, 1869, insensible and cold, with dilated pupils, and twitching of the facial muscles. There was an incised wound an inch and a half long over the left parieto-occipital articulation, leading down to a large piece of depressed bone. The patient had also sustained fracture of the bones of the left leg. The injuries were caused by his having been thrown out of a cart. About an hour and a half after admission he regained consciousness, and Mr. Holmes, finding on examination of the head, extensive comminution, with

depression, of both tables of the skull, removed the fragments with the help of an elevator and Hey's saw.

The comminuted and depressed pieces are preserved in the preparation, and when put together show that a portion of the skull, two inches and three quarters long and about one inch and five-eighths wide, had been fractured.

After the operation, the boy was for some days very restless, and hardly conscious, but eventually he recovered perfectly.

Surgical Cases. 1869. No. 1581. *St. George's Hospital Reports,* vol. v, p. 265.

3405. Depressed Fracture of the Skull. Bony Union.

244 *a.* * The depressed portion is situated on the right side of the skull, including part of the parietal and part of the frontal bone. It is somewhat triangular in shape, the apex of the triangle being the part most depressed. Within the skull the depression is well marked, and the apex of the triangle forms a sharp point of bone, which is directed obliquely downwards. This point had perforated the dura mater and lodged itself in a little pit or depression in the brain substance. Union has taken place by bony matter deposited between the edges of the fracture, which are for the most part rounded off.

The specimen was removed from the body of a man who died in the Hospital of another disease, and in whom the fracture was not ascertained until the post-mortem examination. The only history that could be obtained from his wife was that he had been in the Middlesex Hospital in August 1853 (fourteen years and a half before his death), with a severe injury to the head, and that ever since he had been subject to violent paroxysmal pain in that region. The records of the Middlesex Hospital contain no history of the case.

3406. Extensive Fracture of the Middle Fossæ of the Base of the Skull.

6 *a.*

A boy, aged 5, was admitted into the Hospital on June 25, 1870, under the care of Mr. Holmes. He had been run over by a waggon, and on admission, was insensible, and bled from both ears. A few hours after admission he vomited freely, and some clear fluid escaped from the left ear. About noon on June 26 a severe convulsion took place. He died in the evening.

The specimen shows a fracture commencing in the postero-inferior portion of the right parietal bone, running downwards across the squamous portion of the temporal,

across the base of the petrous portion, then across the base of the skull. The right petro-occipital and squamo-sphenoidal sutures are separated; so is the suture between the body of the sphenoid and the basilar process of the occipital bone. On the left side the fracture extends into the squamous portion of the temporal bone, nearly as far as the squamo-parietal suture, but the petrous portion is uninjured. On the right side a probe could be passed from the external auditory meatus, through the tympanum, into the fractured petrous bone. The body had sustained other severe injuries, for which see No. 3428.

Post-Mortem and Case Book. 1870. No. 184.

3407. 26 *a*. Fracture of the Middle and Posterior Fossæ of the Base of the Skull.

The specimen shows a fracture completely dividing the petrous portion of the temporal bone just in front of the internal auditory foramen. The seventh nerve is torn nearly across, but the membrana tympani is seen uninjured. The fracture extended from the left side of the foramen magnum across the petrous bone, and stopped just short of the sphenoidal fissure.

The patient, a child aged 2, fell ten feet out of a window. When admitted he was insensible, but he soon became conscious and vomited blood. Meningitis ensued, and he died on the sixth day from the injury.

Post-Mortem and Case Book. 1873. No. 151.

3408. 26*b*. Fracture of the Vault and the Base of the Skull, with Laceration of the Middle Meningeal Artery.

* There is a longitudinal fracture about two inches long in the right parietal bone, an inch and a quarter above the squamo-parietal suture, involving one of the large grooves for the middle meningeal artery and running forwards to the frontal bone. From either end of this fracture runs a vertical fracture, the anterior across the greater wing of the sphenoid into the middle fossa of the skull, the posterior downwards to the base of the petrous portion of the temporal bone. The main trunk of the meningeal artery was wounded, and a large extravasation of blood had taken place on to the surface of the brain; and the cerebral tissue was lacerated.

The patient, a man aged forty, was admitted into the medical wards of the Hospital on July 24, 1871, being supposed to be suffering from a "fit". Blood was, however, found extravasated beneath the scalp, in the right temporal region, and he was transferred to the

surgeons, unconscious, but not paralysed. He continued in this state until his death in the evening of the same day.

Post-Mortem and Case Book. 1871. No. 160.

3409. Fracture of the Temporal Bone. Separation of the Occi-
32 b. pito-Parietal Suture.

* This man fell thirty feet from a scaffolding, striking the head directly. See No. 3452.

Post-Mortem and Case Book. 1875. No. 280.

3410. Fracture of the Skull, commencing an inch and a half
32 a. above, and half an inch to the right of the external occi-
* pital protuberance, and causing Separation of the right limb of the Lambdoid Suture.

The patient, a boy aged 16, was admitted into the Hospital under Mr. Holmes on April 29, 1872, and died shortly after admission. No history of the accident exists.

Post-Mortem and Case Book. 1872. No. 102.

3411. Fracture of the Zygoma and Malar Bone.
6 b. This specimen was removed from the body of a man
* who died, in the Hospital, of broncho-pneumonia, eleven days after sustaining a severe fracture of the skull.

A line of fracture extended across the anterior fossæ, through the orbital plates, and through the body of the sphenoid. The comminuted fracture of the left temporal bone, shown in the specimen, was continuous with the fracture in the anterior fossæ. The zygoma is seen to have been broken in three places, and the malar bone to have been loosened from its bony attachments.

Post-Mortem and Case Book. 1879. No. 103.

3412. Fracture of the Lower Jaw, close to the Symphysis.
32 c. A vertical fracture, just to the left of the symphysis,
* separates the lower jaw into nearly equal portions.

No history.

3413. Fracture of the Lower Jaw. Fibrous Union.
38 a. The patient, a woman aged 47, was admitted on account of an abscess under the chin, connected with necrosis. Erysipelas supervened, and she died. Post-mortem an old fracture, united by a false joint, was found just in front of the left angle of the jaw. The investing cartilage of the corresponding articulation was eroded, and the bone intervening between this and the fracture was much

roughened from inflammation. The dental canal and its contents were continued through the false joint.

Post-Mortem and Case Book. 1879. No. 241.

3414. Fracture of the Spine. Bony Union.

43 *b.* The fracture has involved, as far as can be seen, the

* bodies and transverse processes of the eleventh and twelfth dorsal vertebræ; and, in addition, the eleventh rib on either side appears to have been broken; but the seats of injury are so covered with callus that it is impossible to define exactly the extent of the fracture. Considerable angular curvature of the spine resulted, as will be seen from the dislocation backwards of the twelfth dorsal vertebra.

The parts were removed from the body of a man, aged 30, who was admitted into the Hospital on November 22, 1869, under Mr. Prescott Hewett's care, with the injuries described, which were caused by a fall from a height of thirty feet. He lingered on in a paraplegic state until May 31, 1870. Just before Christmas he suffered from pain in the chest and much dyspnœa. On December 30, 31, and January 1, severe rigors occurred; and his death, in the following May, was ascribed to pyæmia; but no proof of the disease was discovered at the post-mortem examination.

Post-Mortem and Case Book. 1870. No. 156.

3415. Fracture of the Sternum between the First and Second

59 *a.* Pieces.

The lower end in this specimen overlaps the upper fragment in front. See No. 3417.

Post-Mortem and Case Book. 1870. No. 10.

3416. Emphysematous Tumour of the Skin, resulting from Frac-

61 *a.* ture of the Sternum and of the sternal ends of the Second and Third Ribs, with Laceration of the second Intercostal Space.

The patient, a man aged 68, was knocked down by a horse and kicked whilst on the ground; he was admitted in a state of partial collapse, and died the next day. During his stay in the Hospital, a large rounded resonant swelling was observed at the upper part of the right chest, rising and falling with respiration. During the inspiratory period, the skin was drawn inwards in the shape of a cup, so as to leave no doubt concerning the existence of a fracture of the ribs.

Post-mortem the skin of the part was found merely ecchymosed. The lung was lacerated at a point corresponding to the seat of fracture, and lay in a state of collapse at the back of the chest; the pleura contained about two pints of blood, and its cavity communicated with the subcutaneous air-chamber above described.

Post-Mortem and Case Book. 1879. No. 301.

3417. Comminuted Fracture of the Right Clavicle, about two
78 *a.* inches from the Acromial end.

* The bone was removed from the body of a man, who fell about fifteen feet off a ladder. He was admitted into the Hospital under Mr. Holmes on January 10, 1870, The sternum was fractured also. It is preserved in Preparation No. 3415. The patient died on January 12 from the effects of injuries to the head.

Post-Mortem and Case Book. 1870. No. 10.

3418. Fracture of the tip of the Acromial end of the Clavicle.
81 *a.* The patient, a boy aged 15, fell from a height of fifty-five feet. The skull was fractured. Colles' fracture on the left side (Preparation No. 3424) coexisted with the fracture of the right clavicle.

Post-Mortem and Case Book. 1877. No. 287.

3419. Comminuted Fracture of the Supraspinous Fossa of the
84 *a.* Scapula.

* A fracture is seen in the infraspinous fossa also.

The patient, a man aged 30, was run over by a dray. He was admitted into the Hospital under Mr. Holmes' care on June 23, 1871, and died three days afterwards of his other injuries.

Post-Mortem and Case Book. 1871. No. 137.

3420. Fracture of the Surgical Neck of the Humerus.
89 *d.* The fracture appears to be recent, and no attempt at repair is visible.

No history.

3421. Oblique Fracture separating the External Condyle of the
91 *a.* Humerus; Union in an abnormal position.

* The bone was removed from a little girl who had sustained an injury to the right elbow-joint by falling out of a carriage four months previously. The result was a shortening of the forearm, due to dislocation of the elbow backwards. The lower end of the humerus was removed by operation, and it was found that there had been an

oblique fracture between the condyles, separating the external one from the rest of the bone. The fragment had been dislocated upwards, and rested against the outer side of the shaft of the humerus, to which it had become firmly united by bony union. On the under surface of this fractured portion was an articular facet for the head of the radius.

Pathological Society's Transactions, vol. xxi, page 315.

3422. The Radius corresponding to the Ulna shown in preparation No. 3460, showing a Fracture of the Shaft United at an angle of about 130°.
98 *b.*
*

3423. Fracture of the Lower End of the Radius.
93 *a.*
*
The bone is fractured about half an inch above the wrist-joint, in a transverse direction.

It was removed from the body of a young woman, aged 20, who had fallen down stairs. She had also sustained other injuries, from which she died.

3424. Separation of the Lower Epiphysis of the Radius.
114 *b.*
The patient, a boy aged 15, had fallen fifty-five feet, and fractured his skull and right clavicle as well. (Preparation No. 3418.) The ligaments of the left wrist were torn, but the bones, with the exception of the radius, were not fractured. The lower end of the radial diaphysis may be seen protruding through the lacerated anterior ligament.

Post-Mortem and Case Book. 1877. No. 287.

3425. Ununited Fracture of the Radius and Ulna of two months' date.
202 *a.*
There is no union at all between the ends of the bone; but fibrous bands unite the fragments externally.

Post-Mortem and Case Book. 1869. No. 111.

3426. Fracture of Both Bones of the Forearm. Bony Union.
104 *a.*
*
The radius has been fractured just below its middle, the ulna about two inches and a half above the wrist-joint. There is slight displacement of the radial fragments, the upper being drawn slightly inwards and overlapping the lower. Around the fractured ends there is some slight thickening. There is no displacement of the ulnar fragments, and the situation of the fracture can scarcely be perceived.

The specimen was obtained from a patient who was admitted into the Hospital with the history that eighteen

months previously he had fallen on the left arm and broken it, and that six months afterwards a piece of bone had come away. Since the accident he had been unable to use the limb. Upon admission, there was found to be complete paralysis of the extensor muscles, though they contracted under the influence of galvanism. At the man's earnest request the limb was removed. A careful dissection was made, and nothing found to account for the paralysis. The muscles were firm, fleshy, and florid, and, examined microscopically, appeared healthy. The nerves also were quite natural.

Surgical Cases. 1869. No. 114.

3427. Comminuted Fracture of the Pubes.

119 *a.* * The pubes have been completely separated from the ilia and ischia by fracture of their rami. In addition, the body of the right is fractured both vertically and horizontally.

The specimen was removed from the body of a man who died in the Hospital on March 16, 1869, fourteen days after a fall of about fifteen feet from a scaffold.

Post-Mortem and Case Book. 1869. No. 87.

3428. Comminuted Fracture of the Pubes.

119 *b.* There is a separation of the two bones at the symphysis. On the right side the body is fractured in two places; on the left, it is broken across, just externally to the iliopectineal eminence, and severed by another fracture from the ramus. There is partial separation of the right sacroiliac synchondrosis. The bladder is shown, torn from its attachments, especially on the right side. The anterior wall of the sphincter ani was lacerated.

The parts were removed from the body of a boy, aged 5, who was run over by a waggon on June 25, 1870, and died on the following day. (See No. 3406.)

Post-Mortem and Case Book. 1870. No. 184.

3429. Fracture of the Neck of the Femur. Bony Union.

142 *a.* * The fracture has been intracapsular. There is considerable displacement, the head of the bone having been driven downwards, and impacted in the neck of the femur. Where the two fragments are impacted, there is firm bony union.

The specimen was taken from the body of a man, aged 67, who had fractured his thigh about a year before his death.

Post-Mortem and Case Book. 1868. No. 305.

3430. Section showing Union of an Impacted Intracapsular
183 *a*. Fracture of the Neck of the Femur.
* From the body of a Chelsea pensioner, aged 80, who slipped down and fell on his hip. He recovered from the accident and could walk well. He died two years afterwards from other causes.

3431. Corresponding section to the above.
183 *b*.
*

3432. Extracapsular Fracture of the Neck of the Femur. Bony
* Union.
The posterior half of the greater trochanter appears to have been broken off in one piece with the head and neck. The fragments are firmly united by bone, but not in correct position, the lower being displaced upwards, and everted with relation to the upper.
The specimen was received from abroad, no history accompanying it.

3433. Comminuted Fracture of the Upper End of the Femur.
142 *b*. The head, greater trochanter, and lesser trochanter, are
* separated from the shaft of the bone, and from each other.
The specimen was removed from the body of a man, who had fallen a distance of forty feet over an embankment.
Post-Mortem and Case Book. 1868. No. 283.

3434. Fracture of the Neck of the Femur, and of the two Tro-
182 *b*. chanters.
* Removed from the body of a man, aged 81, admitted into the Hospital under the care of Mr. Holmes, April 26, 1873. He had fallen on to the left hip, upon the pavement, and at the time of admission there was slight eversion and shortening of the limb. He died with pneumonia, June 21.
The neck of the bone has been driven a short distance into the cancellous bone between the trochanters, which are both split off. Some callus has been thrown out, especially about the lesser trochanter.
Post-Mortem and Case Book. 1873. No. 154.

3435. Fracture of the Neck of the Femur, and of the two Tro-
182 *a*. chanters.
* Removed from the body of a man, aged 78, who was admitted into the Hospital under Mr. H. Lee's care, on July 14, 1870, on account of a large bed-sore over the

sacrum. He had been bed-ridden for several months after an injury to the hip, how inflicted does not appear. He died three weeks after admission from exhaustion.

The specimen shows extracapsular fracture of the neck of the femur. The greater trochanter is split, and the line of cleavage runs down the shaft of the bone. The lesser trochanter is broken off with the posterior half of the greater. Much callus has been thrown out between the fragments around the lesser trochanter; but about the cervix of the bone and the greater trochanter, with the exception of a little callus in the digital fossa, hardly any attempt at union has taken place.

Post-mortem and Case Book. 1870. No. 214.

3436. 145 *e.* Section of an united Fracture of the Femur immediately above the lesser trochanter.

There is bony union of the parts, with such displacement and rotation that the head of the femur is in close relation inferiorly with the lesser trochanter.

No history.

Post-Mortem and Case Book. 1875. No. 247.

3437. 145 *a.* Fracture of the Shaft of the Femur. Union with great Displacement.

* The fracture is immediately below the trochanters, and there is great displacement, the lower fragment being drawn forwards and upwards. The union is bony and firm.

No history.

3438. 167 *a.* Fracture of the Shaft of the Femur. Bony Union. (Ununited Fracture of the Neck.)

* The chief interest in the specimen is that the bone was taken from a man who had completed his ninety-ninth year while in the Hospital. He was admitted on May 19, 1869, with a history of having slipped down stairs fourteen days previously. On admission a long splint was applied to the fractured limb, but it occasioned so much pain that it was found necessary to remove it, and thus the misplacement of the fragments is accounted for.

The two fragments overlap each other for about six inches and are in the same line. A large quantity of callus has been thrown out between and around the fractured ends, so that at the time of death firm bony union had taken place, a remarkable circumstance when the great age of the patient is taken into consideration; and also the fact that he is reported to have been in a

low weak state up to the time of his death on August 24, 1869.

It would appear that at some previous time the man had sustained an intracapsular fracture of the head of the same bone. The two surfaces, as the specimen shows, have become quite smooth and polished from constant attrition.

Post-Mortem and Case Book. 1869. No. 248.

3439. Fracture of the Shaft of the Femur. Union with great
145 *c.* Displacement.

* The union is complete, bony, and firm. The lower fragment is driven upwards behind the upper, so that the latter overlaps it to the extent of about two inches; and the two pieces, where in contact, are firmly blended together by thick bony deposit. The upper fragment projects prominently forward.

The specimen was removed from the body of a man who was admitted into the Hospital for another disease, of which he died. No history of the fracture was obtained.

3440. Fracture of the Shaft of Femur. Union with Displace-
145 *d.* ment.

* The lower fragment has been displaced upwards, behind, and a little internal to, the upper fragment, to which it is united by firm bone. Irregular projections of bone have been thrown out on the posterior aspect of the fracture.

No history.

3441. Section of a Femur showing Union of Fracture of the
145 *b.* Shaft in a child.

The bone has been cut longitudinally. There is considerable deformity, the two fractured ends being placed at an obtuse angle with each other, forming a segment of a circle with its convexity forwards. There is a large amount of callus thrown out around the fractured ends, and the medullary canal is filled at this point with the same material.

The specimen was taken from the body of a child aged fourteen months, who was admitted into the Hospital with a fracture of the left femur. She was kept in bed, but no splint was applied. She was subsequently attacked with measles; of which she died, on the thirty-second day after the accident.

Surgical Cases. 1868. No. 694.

3442. Section of a Femur showing Union of Fracture of the
145 *bb.* Shaft in a Child.

The apposition of the fragments is so perfect that it suggests the possibility of the fracture having been partly subperiosteal. In the fresh state the fractured ends were surrounded with a red fine-grained callus, and slightly separated from each other by a line of transparent soft tissue, which extended from the medulla of the bone to a small cavity in the callus. Under the microscope islands of cartilage were discovered in the callus.

The specimen was removed from the body of a child aged barely two years, who was admitted with the fracture on September 22, 1878. Considerable angular displacement then existed. Treatment was by weight and sand-bags. On October 12 the patient was discharged with the limb in a gum-bandage. On October 29 he was readmitted with laryngitis, and died the same day.

Post-Mortem and Case Book. 1878. No. 308. *Surgical Cases.* 1878. No. 1398.

3443. Partial Separation of the Epiphysis of the Lower End of
137 *a.* the Femur, with oblique Fracture.

* The condyles are separated from each other by a longitudinal fracture through the inter-condyloid notch. The internal condyle is separated from the shaft of the bone at the epiphysial cartilage. The external condyle is not separated at the epiphysial line; this is still intact: but there is an oblique fracture of the lower end of the diaphysis, separating the external condyle and a small portion of the shaft.

The specimen was taken from a boy, who was stated to be only 15, but who was fully developed, and looked at least 18, as may be judged from the size of his femur. He was a baker by trade, and caught his leg in the machine employed in the process of bread-making; he was brought to the Hospital, where there was found to be such laceration of the soft parts, conjoined with the fracture, that amputation was performed immediately. He died the same day.

3444. Comminuted Fracture of the Lower End of the Femur.
133 *a.* The patient, a woman aged 36, was admitted into the
* Hospital on February 23, 1870, under Mr. Pollock's care, with compound comminuted fracture of the femur, and of the lower jaw. She had fallen from a second floor window on to the pavement below. She died of pyæmia.

The fracture of the femur, as seen in the preparation,

commences at the upper part of the lower third, runs down the shaft, and then extends between the condyles. Two fragments are split off the shaft, one just above the popliteal space, and the other in that space. On the anterior surface are seen two pieces split off, one just above either condyle.

Post-Mortem and Case Book. 1870. No. 70.

3445. Comminuted Fracture of the Upper End of the Shaft of
134 *a.* the Tibia.

* A railway labourer, aged 26, slipped in front of a loaded truck of earth. One of the wheels went over both legs, fracturing the right leg below the knee. The fibula was not broken. An attempt was made to save the limb, and for a period of two months profuse discharge and some dead bone came away. The condition being hopeless, Mr. Holmes amputated on May 18, 1879. The patient made a good recovery.

Presented by Mr. TIMOTHY HOLMES.

3446. Fracture of both Bones of the Leg. Bony Union.
246 *a.* The fibula has been fractured just above its middle, the
* tibia a little below. Firm bony union has taken place, with some displacement, the inferior fragment of the fibula being displaced backwards, that of the tibia inwards.

No history.

3447. Fracture of both Patellæ.
185 *a.* In the patella which is placed uppermost in the jar (the left) the fracture is transverse, the fragments are in close apposition, and there is some amount of fibrous union. The fibres of the ligamentum patellæ covering the bone have not been completely ruptured. The right patella is also fractured transversely, but the fragments are separated by a wide interspace, and there is no effort at union.

The specimens were taken from the body of a man who had fallen from a scaffold, and who had also sustained a fracture of the base of the skull. He survived the injuries fifty days.

Post-Mortem and Case Book. 1868. No. 161.

3448. Femur of a Rabbit, showing the Union of Fracture.
241 *a.* The fractured ends overlap each other, and a large quan-
* tity of callus has been thrown out around them. The bone is much shortened.

3449. Femur of a Fowl, showing an United Fracture of the
242 a. Shaft.

* *Presented by* Dr. NICHOL.

3450. Section showing Displacement of the Sixth Dorsal
43 a. Vertebra, the result of an accident.

A boy, aged 11, was admitted into the Hospital on October 13, 1866, having fallen from a height of about twenty-five feet. He was paraplegic and had lost control over the bladder and rectum. As far as could be made out at the time of his admission, there was a depression over one of the upper lumbar vertebræ; but the diagnosis was rendered extremely difficult, by reason of the swelling of the parts. The boy suffered severe pain in the back and abdomen. The urine became alkaline on the fifth day. On the twelfth day after the accident bed sores supervened, and he sank, exhausted, on Nov. 13.

On opening the spine post-mortem, there was found to be a very considerable effusion of firm gelatinous lymph outside the dura mater, extending from the sixth dorsal vertebra to the tenth, and most extensive opposite the eighth. Here the cord was much softened, but the softening was confined to this spot. The effusion entirely surrounded the cord. There was slight angular curvature opposite the sixth dorsal vertebra, due to partial displacement of this vertebra backwards from the fifth. There was no fracture of the bodies, but the anterior superior border of the sixth was absorbed and rounded off, and the intervertebral substance gone from between it and the fifth. The denuded surfaces were covered with a smooth glistening substance resembling synovial membrane; but its structure could not be determined under the microscope.

Post-Mortem and Case Book. 1866. No. 304.

3451. Rupture of the Posterior Costo-Sternal Ligament. Par-
73 a. tial separation of Costal Cartilages from the Sternum.

The lesion affects the third and fourth costo-sternal articulations of the left side.

No history.

3452. Dislocation of the Head of the Humerus, with Avulsion
107 a. of the greater part of the Greater Tuberosity.

The preparation shows the scapula and portions of the clavicle and humerus. The deltoid and teres major muscles, and the greater part of the subscapularis and teres minor, have been removed.

The head of the humerus, which originally lay under the coracoid process, has been drawn outwards to show the fragment of the greater tuberosity, which is attached to the torn capsule. A rod is passed between the coracoid process and the subscapularis muscle, and another under the tendon of the infraspinatus, below which a portion of the teres minor is seen.

The skull was fractured also (See No. 3409.).

Post-Mortem and Case Book. 1875. No. 280.

3453. 114 *a.* Dislocation at the Wrist (with fracture), simulating Colles' Fracture of the Forearm.

The subject, a labourer, aged 25, had fallen from a height; he died from internal injuries on the same day. The condition was mistaken at first for one of Colles' fracture. The scaphoid bone is broken transversely, its upper half, together with the semilunar, remaining in connection with the radius. The distal end of the scaphoid and the rest of the carpus, with the hand, are dislocated backwards, but do not overlap the end of the radius. The ligaments connecting the first and second carpal rows are completely severed. There was no fracture of the bones of the forearm.

Post-Mortem and Case Book. 1877. No. 264.

3454. 209 *a.* Dislocation of the Tibia backwards at the Knee. Ankylosis.

The posterior surfaces of the condyles of the femur are united to the anterior margins of both tuberosities of the tibia by firm bony ankylosis; and the patella by fibrous tissue to the outer condyle of the femur.

The specimen was taken from the body of a patient who died of some other disease. There is no history of the injury.

3455. 212 *a.* Dislocation of the Astragalus forwards on to the Scaphoid Bone.

The patient, from whom the specimen was taken, caught his foot between two bricks, of which the steps he was descending were built. In order to reduce the dislocation, many of the tendons round the ankle-joint were divided subcutaneously; but, in a few days, the skin sloughed, and left the head of the astragalus protruding. Rigors followed, with profuse sweating; and the limb was amputated through the knee-joint. The patient recovered.

The astragalus, as will be seen in the preparation, is

dislocated on to the dorsum of the scaphoid. The deltoid ligament is ruptured; but no fracture of any bone has taken place. The dorsal ligaments connecting the end of the tibia, the astragalus, and the scaphoid, are ruptured.

Surgical Cases. 1866. No. 904.

3456. 213 *a.* Astragalus which was removed during life in a case of Compound Dislocation of that Bone forward.

* The accident had been caused by some masonry falling upon the patient. Death occurred the next day. The bone will be observed to be entire (practically speaking). Most of the ligaments had been torn partially or completely.

Post-Mortem and Case Book. 1879. No. 50.

3457. 218 *a.* Gunshot Wound of the Frontal, with Fracture of the Parietal and Temporal Bones.

* The specimen was taken from the body of a man, aged 65, who committed suicide by shooting himself with a pistol on March 17, 1869.

A circular hole is seen just behind the external angular process of the frontal bone on the right side. The inner table is more extensively injured than the outer. From this aperture a linear fracture runs to the left, and then backwards to the left parietal bone, dividing into two at the coronal suture. One of its branches runs backwards for two inches, and ends in the sagittal suture, the other downwards into the left temporal bone.

A second line of fracture runs backwards and upwards for two inches from the bullet hole.

Post-Mortem and Case Book. 1869. No. 93.

3458. 65 *a.* Fracture of the Sixth Rib, and Laceration of the Interspace between the Fifth and Sixth Cartilages, by the passage of two pistol bullets.

The specimen was taken from the body of a suicide who was brought into the Hospital on November 6, 1869. The wound was situated about two inches below the left nipple, and the skin and soft tissues around it were charred by the explosion. The fracture of the sixth rib just externally to the cartilage is clearly shown.

The heart is shown in Ser. VI, the lung in Ser. VII.

Post-Mortem and Case Book. 1869. No. 321.

3459. 106 *a.* Portions of Bone Removed in a Case of Excision of the Shoulder-joint after Gunshot Wound.

* The head of the humerus is extensively comminuted; about a third of it is included in one fragment, and there are a number of small pieces.

The fragments were removed from the body of a man, whose gun, accidentally exploding, lodged a charge of small shot in his arm. He felt no pain at the time, and walked some distance after the accident. When he was admitted there was an irregularly circular wound in front of his right shoulder, and the soft parts were much lacerated. The wound was enlarged, and numerous shot and shattered fragments of bone were removed. The patient died on the thirteenth day with symptoms of pyæmia.

Surgical Cases. 1867. No. 230.

3460. 98 *a.* Gunshot Fracture of the Shaft of the Ulna. False Joint.

The bone was removed from the body of a prisoner in Millbank Prison, who died in July 1869 with an abscess in the cerebellum. The injury was caused by a bullet wound received at the battle of the Alma in the Russian war of 1854-55. The fracture was oblique, and, as the preparation shows, fibrous union only took place. Between the broken ends of the bone a perfect joint, with a distinct synovial membrane, has been formed.

The corresponding radius is shown in Preparation No. 3422.

Presented by Mr. T. H. P. WILSON.

3461. 258. Skull Cap, showing a Trephine Hole penetrating into the Diploë.

The specimen was removed from the body of a man who was admitted into the Hospital with a scalp wound exposing the bone. On the fourteenth day appeared rigors and other symptoms suggestive of pyæmia. As these symptoms were believed to be due to suppuration in the veins of the diploë, a trephine was applied on the sixteenth, and a little pus evacuated. The patient died the following evening. After death pus was found in the diploë, between the bone and the dura-mater, and in the arachnoid cavity; but nowhere else in the body.

Post-Mortem and Case Book. 1868. No. 341.

3462. 77 *a.* Replacement by fibrous tissue of the Inner Half of the Clavicle, presumably after injury or operation.

The specimen was removed from the body of a labourer, aged 24, of healthy aspect, who died from fracture of the spine and ribs. An extensive scar existed over the middle of the right clavicle; and to this the outer half of the bone, which protruded somewhat under the skin, was strongly

adherent. The inner half was almost entirely wanting. A very small piece of bone was found in connection with the sternum, and this was joined to the outer portion and to the cutaneous scar by a broad stout fibrous band. Lateral fibrous connections had been formed with the upper ribs and with the scapula. The shoulder was somewhat shortened, and the chest depressed at its upper part, but the arm was strong.

No history of the case was obtained.

Post-Mortem and Case Book. 1878. No. 33.

3463. 259. Injury to the Cartilage on the upper surface of the Astragalus.

The cartilage is wanting over a circular area rather more than a quarter of an inch in diameter. The edges of the pit thus formed are steep, and sharply cut.

The man from whom the bone was removed fell with some steps, and sustained a compound fracture of the right leg, extending into the ankle-joint. The limb was amputated, but the man sank seven days after the operation.

Surgical Cases. 1869. No. 1375.

II.

DISEASES OF BONE.

3464. 1 *a.* Thickening of the Skull-cap, with Obliteration of the Diploë.

* The sutures are well marked.

Removed from a man, aged 33, who died of disease of the heart.

Post-Mortem and Case Book. 1868. No. 340.

3465. 40 *a.* Excessive Porosity of the anterior part of the Square Lamina of the Body of the Sphenoid Bone.

* The bone is more porous and indurated than it should be; especially in the neighbourhood of the posterior clinoid processes; and some nodules of new bone exist here and there. In the fresh state it was very vascular.

The specimen was removed from the body of a man, aged 36, who, during life, exhibited ptosis of both upper eyelids, and complete immobility of both eyeballs; dysphagia; difficulty in articulating words, opening the mouth, or pro-

truding the tongue; and loss of muscular power in the arms and chest. He died of apnœa. After death the brain was found to be perfectly healthy; but the arachnoid covering its base was much thickened, as from former inflammation.

Pathological Society's Transactions, vol. x, p. 224. *Presented by* Dr. JOHN W. OGLE.

3466. Distorted Pelvis, the result of Mollities Ossium. The last two lumbar vertebræ are included in the preparation.

* The bones can be cut with a knife, like soft wood. The ilia are crumpled up; the two pubes bent together from their symphysis, so as to lie almost in apposition; their descending rami crumpled; the sacrum doubled on itself; the vertebræ bent to the right, and their spines twisted. The cavity of the pelvis is reduced to small dimensions, and the symphysis pubis is on a level with the body of the last lumbar vertebra.

No history.

3467. Lower End of the Femur from a case of disease of the
23 *a*. knee, showing the results of Inflammation.

* The surface is roughened and is covered by a number of deposits of new bone; beneath these the bone is hollowed out and honeycombed, and in the cells thus formed are numerous small loose pieces of ivory-like bone. At the back, immediately above the condyles, is a large cavity, opening externally by a small sinus, which in the recent state was full of pus. Above this a thin plate of necrosed bone is beginning to separate.

The specimen was obtained from a case in which disease of the knee had existed for fifteen months. Amputation was performed on November 7th, 1867, by Mr. Prescott Hewett.

Surgical Cases. 1867. No. 1181.

3468. Section showing Osteo-myelitis of the Femur.
29 *a*. A longitudinal section of the shaft has been made. The whole of the cancellous tissue and medullary cavity is studded with minute abscess-cavities the size of peas.

These cavities, in the recent state, were filled with pus, and lined by a highly vascular membrane. The bone presented a very vascular appearance.

The specimen was taken from the body of a woman, who was admitted with suppuration in the knee-joint, for which amputation was performed. She died on the twelfth day after the operation, of pyæmia, with repeated rigors

and sweating. After death, secondary abscesses were found in the lungs. The stump was in a very sloughy condition, and the clot in the femoral artery was almost destroyed. The femoral vein where it was divided contained a black clot, and the ligature still remained attached to it; higher up, above the junction of the profunda, the vein contained a buff-coloured clot, which was adherent to its lining membrane. For a drawing illustrating the state of the bone and the vessel, see Series XXI, *infrà*.

Post-Mortem and Case Book. 1866. No. 292.

3469. 31 *a.* Section of a Tibia showing an Abscess in the shaft, with a Trephine hole leading into it.

* The whole of the bone shows the effects of long-continued inflammation; it is hard and dense, and the cancelli are filled up with bony material. The medullary cavity is obliterated. In the upper part of the shaft there is a circumscribed cavity the size of a walnut, occupying the centre of the bone. In the recent state it was full of pus.

The specimen was removed from the body of a man who had suffered from pain in the tibia for twenty-six years, during which time a sinus had been discharging and necrosed fragments coming away. The bone was trephined and the cavity laid freely open; but he died of pyæmia.

Post-Mortem and Case Book. 1868. No. 335.

3470. 30 *a.* Abscess in the lower end of the Radius, following a sprain of the wrist.

The patient, a lad aged eighteen, was admitted into the Hospital, in April, 1871, with cellulitis, following a sprain of the wrist. The pus subsequently burrowed among the muscles and made its way into the wrist joint. Mr. H. Lee amputated in the lower third of the arm on July 20th, 1871. The patient made a good recovery, and left the Hospital on August 16th.

The end of the bone is widened, and forms an incomplete shell, which in the recent state contained foul pus.

Surgical Cases. 1871. No. 975.

3471. 78 *a.* Necrosis of the Tibia, the result of a Fracture. Fragments removed by operation.

* The fragments shown were removed by Mr. Prescott Hewett and Mr. Rouse from the leg of a man aged 37, between June 16, 1870, and January 12, 1871. Fracture, with contusion, of the bone, had taken place about two years previously. The patient made a good recovery.

Surgical Cases. 1870. No. 845.

3472. Necrosis, and Disorganisation of the Knee-Joint; the re-
121 b. sult of acute Periostitis and Ostitis.

* The preparation shows the left femur; by the side of which are hung, in succession from above downwards, the lower epiphysis of the femur, the upper end of the tibia with its epiphysis, the epiphysis of the head of the femur, the patella, and the epiphyses of the trochanters.

The upper end of the femur and its epiphyses are healthy, and their surfaces of separation (displayed by maceration) are contrasted with those of the lower end of the femur and its epiphysis, which were parted during life. The greater part of the lower half of the femur is necrosed; its lower end is ragged and cancellous, as also is the upper surface of the epiphysis. The articular surfaces of the knee-joint are extensively eroded; but the upper epiphysis of the tibia is still attached to the shaft.

At the post-mortem examination, luxation of the knee was perceived, the tibia being displaced backwards, and carrying with it the lower epiphysis of the femur. The cavity of the joint was full of pus, which had broken through the synovial membrane anteriorly, and extended into the subcutaneous tissues. The anterior crucial ligament and most of the posterior were wanting; also the whole of the semilunar cartilages, and about half of the cartilaginous coating of the articular surfaces of the tibia, femur, and patella. The areolar planes adjacent to the necrosed portion of the femur were infiltrated with pus. An incision exposed the linea aspera, part of which had separated in minute fragments. The hip-joint was quite sound.

The right hip-joint was full of pus, and about two-thirds denuded of cartilage. Diffuse abscesses existed in the right buttock. The right elbow-joint was completely disorganised, all its cartilages and ligaments gone, and its cavity filled with pus.

Nothing remarkable was found in other parts of the body.

The clinical history of the case extends over a period of about eight weeks, the last thirty-three days of which were passed in the Hospital. The case began with pain in the left knee and thigh. After a week, the patient, a boy aged 9, had to take to bed; and, on admission, the knee was found flexed, and the thigh uniformly swelled and fluctuant. The right hip and thigh were also swelled and acutely tender, and the right elbow the same. The incision in the left thigh was made four days later

under antiseptic precautions, but was subsequently exposed on account of hæmorrhage. The temperature, as a rule, varied from 100° to 103°, reaching 104·2° and 104·8° on two occasions. The right hand was swelled from the tenth day in Hospital. The displacement of the left knee dated from the eighteenth. Death ensued from diarrhœa and exhaustion. No rigors occurred.

Post-Mortem and Case Book. 1880. No. 43.

3473. Necrosis of the whole Diaphysis of the Tibia, the result
75 *a.* of Acute Periostitis.

The whole of the diaphysis has undergone necrosis and separated from the epiphyses. The periosteum for the most part has separated, and has been removed. In places, however, it has developed new osseous tissue, and become adherent to the shaft.

The specimen was removed from the body of a boy, aged 9, who was admitted with acute diffuse periostitis after a slight injury. Death occurred from pyæmia five weeks after the onset of the disease.

Post-Mortem and Case Book. 1868. No. 371.

3474. Necrosis of the Tibia, the result of Acute Ostitis.
283. The upper part of the bone is irregularly thick-
* ened, and honeycombed by sinuses that lead to small sequestra. The articular lamella has shared in the disease; and a sinus leading from the shaft opens into the knee-joint.

The patient, a girl aged 12, was admitted into the the Hospital on June 19, 1872, for disease of the tibia, of about two months' duration. Abscess formed in the knee-joint. Mr. Prescott Hewett performed amputation in the lower third of the thigh on May 29, 1873. The patient made a good recovery.

Surgical Cases. 1872. No. 916.

3475. Results of Necrosis of the Femur.
21 *a.* The patient, a man aged 22, was admitted into the Hospital under Mr. Rouse's care, on October 15, 1870. He had suffered five years before from inflammation and swelling in the right thigh. Three years before his admission an abscess had formed, and some bone had come away from an opening on the outer side of the thigh. The sinus never healed. On admission there were sinuses in the right popliteal space and over the outer side of the lower end of the femur, leading to exposed bone. On Oc-

tober 20th Mr. Rouse cut down on the bone, trephined through some hard new bone, and gouged a carious cavity. The man did well at first, but on the fourth day symptoms of pyæmia set in, and he died on November 2nd, 1870.

The specimen shows great thickening and enlargement of the lower third of the femur. In front is seen the carious cavity exposed by the trephine; at the back, a sinus, opening just above the popliteal space.

Post-Mortem and Case Book. 1870. No. 298.

3476. Separation of the Great Trochanter of the Femur by
117 *a.* Necrosis.

The trochanter is separated at the epiphysial line.

The patient, a female aged 23, from whose body the bone was taken, was admitted into the Hospital on October 28, 1869, with pain and swelling in the right thigh of four days' date. She died of pyæmia on November 17. The femur was found necrosed, and the trochanter separated; as shown in the preparation.

Post-Mortem and Case Book. 1869. No. 336.

3477. Popliteal Necrosis.
115 *a.* The Lower End of a Femur. It is unduly porous,
* especially at the back, and the surface is much roughened by outgrowths of new bone. Into the popliteal space, immediately above the condyloid notch, opens a cavity the size of a pigeon's egg, in which lies a piece of porous, dead bone. The articular lamella is eroded.

The specimen was taken from the amputated limb of a woman aged 35, who, for nineteen months, had suffered from disease of the left knee-joint. Amputation was performed by Mr. Prescott Hewett on November 7, 1867. She made a good recovery.

Surgical Cases. 1867. No. 1181.

3478. Popliteal Necrosis.
282. The lower end of the Femur. It is irregularly thickened.
* The anterior and posterior surfaces are extensively excavated. A large cavity opens on the popliteal surface. Several sequestra were removed from this cavity.

The patient, a man aged 35, was in the Hospital under Mr. Prescott Hewett's care, who amputated the limb on January 23, 1873. The patient did well.

Surgical Cases. 1872. No. 1894. *Amputation Book.* 1873. No. 1.

3479. Necrosed Diaphysis of the Tibia, Removed within five
121 a. weeks of the onset of acute Inflammation of the Bone and Periosteum.

The patient, a boy aged 14, was admitted into the Hospital on October 19, 1879. The disease was then of some twelve days date. It had shown itself two days after a fall down stairs. On November 6, the diaphysis, separated from its periosteum and lower epiphysis, was removed by Mr. Holmes, with the exception of a remnant attached to the upper epiphysis. The case of periosteum, left behind, resumed the formation of osseous tissue in the course of the next fortnight, and by July 1880, when the patient was discharged, the renewed tibia was strong enough to support his weight, though an inch and a half shorter than its fellow. This defect was probably due to destruction of the superior tibio-fibular ligaments, which took place after the operation. The ankle-joint had been partially destroyed before.

The fresh specimen weighed nearly 4 oz., and measured 9⅜ inches in length. The tissue at the lower end was beginning to crumble away, but, from a point two inches higher up, the surface of the bone was smooth and polished, not absolutely dry nor quite so moist as normal. The section showed minute bleeding puncta, and the medullary canal was occupied by inflammatory products, which at the lower end were plainly purulent. In its upper part the bone was denser and heavier than normal, and of ivory whiteness. The posterior surface of the shaft was in its whole length covered with a layer of subperiosteal new bone.

Surgical Cases. 1879. No. 1742. *St. George's Hospital Reports,* vol. x, p. 500.

3480. Formation of New Bone, after Necrosis, and Sub-periosteal
278. Resection, of a portion of the Shaft of the Tibia.

The specimen will be seen to consist of the two extremities of the tibia, which were not removed in the operation, and of the case of periosteum, where the bone is deficient. This periosteum is filled up with a deposit of new bone, forming a shaft equal in size to the old one, but not of the same regular shape. It does not adhere in any way to the necrosed ends of the original bone. Its microscopic structure exactly resembles that of healthy bone, except that the Haversian canals are wider and more irregular in shape and size.

The specimen was removed from a boy aged 7, who was admitted into the Children's Hospital, with acute

periostitis and separation of the periosteum from the bone. Twenty-four days after the onset, the greater portion of the tibia was removed sub-periosteally, as seen. The case did not go on satisfactorily, and amputation was subsequently performed.

HOLMES' *Surgical Treatment of Children's Diseases*, p. 395.

3481. Necrosis of the Frontal Bone after a Scalp Wound.
69 *a*. Over the left frontal eminence an irregular piece of
* bone, of about the size of a florin, is necrosed; appearing on both surfaces white, smooth, and ivory like, while a surrounding zone is porous and very vascular. It is outlined on either side by a groove, which has in places penetrated as deep as the diploë, and begun to separate the dead piece.

The specimen was removed from the body of a man, who was admitted into the hospital with a large semi-circular scalp wound, which did not expose the bone.

The wound did well, but suppuration took place on either side of the portion of bone which is seen to be necrosed, and in the interior of the brain. Death occurred thirty-three days after the accident.

Post-Mortem and Case Book. 1867. No. 313.

3482. Necrosis of the entire Lower Jaw. Fragments Removed.
277. They include both condyles, the left angle, and a part
* of the body. They were removed from a girl aged 6, in whom necrosis of the entire jaw had followed an alveolar abscess. The rest of the bone had been previously discharged through an abscess on the face. After the operation new bone formed, and she recovered, with a very good jaw, and free movement.

Presented by Mr. PRESCOTT HEWETT.

3483. Destruction of the Patella, in a case of Abscess of the
276. Knee-joint.
* Nothing of the bone remains but a horse-shoe shaped piece, which formed half its circumference; the rest was entirely destroyed by caries.

The specimen was taken from the limb of a boy aged 9, which was amputated by Mr. Prescott Hewett for abscess in the knee-joint. The patient was, in the first place, admitted with synovitis, resulting from a fall, on August 1, 1866. Amputation was performed on July 18, 1867, and he made a good recovery.

Surgical Cases. 1866. No. 1212. *Amputation Book.* 1867. No. 13.

3484. Ulceration of the Inner Table of the Skull (after Necrosis).
39 a. The necrosed portion of the skull-cap shown in the preparation includes parts of the occipital and of both parietal bones. It is irregularly and deeply eroded from its inner surface. The outer surface is smooth. A piece of thickened dura-mater is attached.

The patient, a labourer aged fifty-six, had been epileptic from youth. Four years and a half before his admission he fell during one of his fits into the fire-place, and was extensively burnt over the scalp. The bone remained exposed from that time, although partial cicatrisation took place.

When he was admitted, in April 1876, a circular piece of the skull-cap, about five inches in diameter, was exposed by the wound; it was necrosed and separated from the surrounding bone, and the pus bathing it was seen to pulsate at one part of the edge. Removal of the necrosed piece was hastened by applications of strong sulphuric acid, and its margin was excised by means of Hey's saw. In September, an abscess formed in the lower jaw. A series of fits occurred on the 16th and 17th of October. After a severe attack of facial erysipelas and the formation of another abscess in the lower jaw, the patient died, on December 6.

Post-Mortem and Case Book. 1876. No. 358.

3485. Inherited Syphilis; Epiphysial Disease, affecting the
286. arms and forearms of a child, aged 11 weeks.

In the tissues surrounding either elbow-joint, but outside the articulation, a small collection of laudable pus was found. The synovial membranes and the articular cartilages were healthy, but there was separation more or less complete of all the epiphyses of the upper extremities. The bones of both sides are shown in the preparation, those of the right in section. On the right side the shaft of the humerus is entirely separated from its lower epiphysis, imperfectly from its upper one. The radius and ulna are in the same way disconnected from their upper ends, whilst a line of incipient separation is visible at the lower epiphysial lines. A similar condition obtains on the left side. In the fresh state a distinct pink line was to be seen at the zone of separation, and the separating epiphyses carried with them the ossifying layer. The lower extremities were free from disease.

The specimens were removed from the body of a female child, aged eleven weeks, an out-patient of the hospital under Mr. Haward. The family history of syphilis was

clear. The most striking clinical features of the case were swelling of the elbows and a state of pseudo-paralysis of the affected limbs. Till these symptoms appeared, seven days before death, the child seemed in perfect health. Roseola, "snuffles," and cachexia followed; and bronchitis, probably due to exposure, was the proximate cause of death.

Pathological Society's Transactions, vol. xxviii, p. 356.

3486. 280. Node, probably Syphilitic, connected with the Shaft of the Tibia.

The patient, a man, aged twenty-one, was admitted into the Hospital under Mr. Pollock's care on July 5, 1871, with caries of the scapula and left tibia; and eventually died of extensive lardaceous disease. He denied having ever suffered from syphilis.

The node seen in the preparation, when cut into, was found to be of putty-like consistence in the centre, the exterior being composed of fibrous tissue. The subjacent bone was rough and uneven. Microscopic examination showed the central soft parts to consist of granular *débris*, amid which were many fat globules. Outside this was a layer composed chiefly of small cells of irregular shape, and externally again were found round cells chiefly (but here many were elongated and oat-shaped) imbedded in a fibrillated stroma. The cells in this last layer showed a decided tendency to assume a linear arrangement.

Post-Mortem and Case Book. 1871. No. 178.

3487. 57 a. Thickening of the Internal Table of the Skull-cap, probably Syphilitic.

* The thickening is not uniform, being principally confined to the back of the skull. That it is due to deposit on the inner surface is shown by the depth of the grooves for the meningeal arteries. The external table is porous and worm-eaten.

The specimen was taken from the body of a man, aged 56, who died in the Hospital of chronic meningitis (see Drawing of Brain, in Series XXI), the duration of which was uncertain, as the symptoms were slight till a few hours before death. The dura-mater appeared healthy. No history of syphilis was obtained.

Path. Soc. Trans., vol. xix, p. 34, and *Post-Mortem and Case Book*, 1868, No. 76.

3488. Syphilitic Caries of the Skull-cap.
68 c. Irregular patches of carious bone are seen. The disease
* has extended through both tables, but is more advanced in the outer. Perforation has occured in the frontal and left parietal bones.

No history.

3489. Syphilitic Caries of the Skull-cap. Partial Repair.
68 a. The disease was of twelve years' duration; the patient
* had been in the Hospital frequently during this period. He was treated with iodide of potassium, and dilute sulphuric acid was constantly applied to the necrosed bone.

The bones are extensively destroyed and perforated, the dura-mater being in one place exposed over an area as large as the palm of the hand. The smoothness of the surfaces and the rounding of the edges show that a healing process was going on in a perfectly satisfactory manner.

In the exposed portion of the dura mater is an oval opening. This, in the recent state, was an incised wound, the result of an accident. With a view of exposing the necrosed bone more fully, the scalp was divided, and in so doing the dura mater was cut. Meningitis was set up, and the patient died.

Post-Mortem and Case Book. 1869. No. 263.

3490. Syphilitic Caries of the Skull-cap. Partial Repair.
68 b. The outer table is extensively eroded and undermined.
* In places the inner table is perforated. The carious surfaces have been smoothed over by new bone.

The disease was probably of syphilitic origin. No history. *Presented by* Mr. J. MERRIMAN, Jun.

3491. Syphilitic Ulcer of the Shaft of the Tibia.
279. A deep ulcer excavates the internal surface in the lower
* third.

The leg was amputated by Mr. Holmes on February 3, 1870. The patient, a man aged 53, had contracted syphilis twenty years previously. He recovered from the operation.

Surgical Cases. 1870. No. 106.

3492. Periosteal Fibroma of the Calcaneum.
152 a. Removed by Mr. Brodhurst from a woman aged twenty-two. It was of three years' growth, and was removed on January 20, 1870. The patient recovered.

Surgical Cases. 1870. No. 45.

3493. Chondroma attached to the upper part of the Shaft of
176 a. the Humerus.

The tumour springs from the compact tissue of the shaft of the bone, and encroaches slightly upon the medullary canal, pushing a compact layer before it. It is of the size of a fœtal head, lobulated, elastic, and semi-transparent. It is surrounded by a dense fibrous capsule, which is continuous with the periosteum of the humerus. Into the base of the tumour there pass from the shaft of the bone several thin osseous plates; these appear to be expanded portions of the compact tissue of the shaft, rather than ossified tracts of the tumour. Under the microscope the growth was found to consist of large oval cells, with one or two granular nuclei, closely placed in a matrix, which was in some parts finely granular, in others dimly fibrillated. The walls of many of the cells were very delicate and indistinct.

The humerus was removed, by amputation through the shoulder-joint, from a male patient, aged 39, an inmate of the Pentonville Prison. The tumour was of two years' growth, and was attributed to a blow received six months before its appearance. The amputation was performed by Dr. V. C. Clarke, on June 23, 1872. The patient made a good recovery, and was seen, well and at work, two years afterwards.

Presented by Mr. Rouse.

3494. Calcareous Chondroma growing from the internal aspect
285 b. of the upper end of the Tibia.

The patient was a cook, aged 27, who seemed to be in the enjoyment of excellent health. The tumour had been growing for five years, rapidly for three months. Pain had been present during the latter period. Amputation was performed by Mr. Pick, through the knee-joint, with a good result.

The tumour, which is solid throughout, is lobulated at the surface; when fresh it gave to the finger a sensation of elasticity, probably due to the layer of hyaline cartilage, somewhat softer than normal hyaline cartilage, which forms the external investment. On section, it was found that the growth started from the bone and was subperiosteal. The central parts were calcareous and excessively dense, with a more chalky aspect than true bone; even here islands of soft cartilage were scattered. The cartilage was rather irregularly distributed in the superficial zones, but, on the whole, became more abundant as the surface was approached. The cartila-

ginous veins converged more or less towards the centre of the tumour, most of them stopping short of the hard central nucleus. Even at the most superficial parts the cartilage was here and there calcified. The bone itself was not invaded, but it was partially surrounded by the new growth.

Under the microscope, hyaline cartilage in various stages of cell proliferation was recognised, but there was no true bone. Angular cells only were found; these occurred either without any stroma, in large cavities, formed at the expense of the hard tissue, or in the meshes of a very coarse stroma, or rather in pseudo-lacunæ, placed close to each other in a homogeneous matrix.

Surgical Cases. 1878. No. 1322.

3495. 180 *b.* An Exostosis, removed from the Ungual Phalanx of the Great Toe.

The growth, which followed a blow, was removed, and the patient, a young gentleman, aged 16 years, was seen after two years, without any recurrence.

Presented by Mr. PRESCOTT HEWETT.

3496. 180 *a.* Exostosis of the Ungual Phalanx of the Third Toe.

The growth, which followed a blow, was removed, but recurred after a few months, and the toe was then amputated. The patient was a young gentleman, aged about 15 years. *Presented by* Mr. PRESCOTT HEWETT.

3497. 191 *a.* * An Ivory Exostosis, removed from the Nasal Fossæ.

The tumour is of an elongated shape, resembling a middle-sized potato, with depressions and elevations passing irregularly over it; it weighs one thousand and and sixty grains; its long diameter is nearly three inches, the short one an inch and two lines, and the longest circumference seven inches. The upper part of the tumour exhibits delicate depressions, together with other deeper sulci (which may also be seen in front, behind, and on the sides), probably for the passage of blood-vessels. At the lower surface is a large nipple-like process, from which, on section, there is a slight appearance of radiation. The base of this process is pierced by a large hole, which, in the fresh state contained a polypoid mass with a cartilaginous nucleus. Under the microscope, a longitudinal section shows that the structure consists of bone-tissue, the characters of which differ from those ordinarily seen in exostoses. A number of vascular canals run, for the most part, parallel to one another, with frequent communi-

cating branches. Their general diameter is less than the average of Haversian canals; but they are more numerous than in ordinary bone. They are surrounded by osseous material, containing very numerous lacunæ, irregularly distributed. A transverse section shows a large number of openings of vascular canals, with some more or less oblique or horizontal canals. The lacunæ are arranged around these, but there is no appearance of a definite Haversian system; indeed, the arrangement of the vessels is too close to admit of the existence of many laminæ. In some parts, the appearance is very much that of calcified cartilage. Clusters of large ossified cells are here closely packed together. There does not appear to be any difference in the density of these parts.

The specimen was taken from a Mahommedan woman, aged 26. She presented a well-marked swelling in the infra-orbital region, which extended downwards and inwards, and encroached on the orbital and nasal cavities. In the right nostril was found the mass seen in the specimen, lying quite loose, without apparent connection with any other structure. It was extracted with much difficulty, after first removing the greater portion of the superior maxillary bone piecemeal. The vomer was found to be absorbed, and also the nasal plate of the right antrum. The wound healed rapidly, and the patient left the Hospital on the tenth day.

Path. Soc. Trans., vol. xvii, p. 256. *Presented by* Dr. THEODORE DUKA, *H. M. Bengal Army.*

3498. Sarcoma of the Lower End of the Femur.

285. The tumour has grown from beneath the periosteum (which is expanded over it), and has also invaded the bone; it affects chiefly the anterior and outer surface of the lower five inches of the femur, and extends nearly to the articular surface. Microscopically, the growth consists chiefly of large oval cells, closely placed in scanty intercellular material; among them are areas of ill-formed cartilage, and a few fusiform cells.

The patient, a man aged 21, had noticed the tumour for ten weeks, when he was admitted into the Hospital, under Mr. Pollock's care, December 20, 1872. The tumour had then attained its present size, and was firm and elastic. The man was pale and thin. The limb was amputated at the hip-joint, January 16, 1873. The patient went on well for a time, but died a month after the amputation, with secondary growths in the lungs and pericardium. One lung is preserved in Series VII. (*vide infrà.*)

Post-Mortem and Case Book. 1873. No. 36.

3499. Calcareous Chondro-Sarcoma growing from the upper
285 *a*. part of the Tibia.

Amputation was performed by Mr. Pick, on December 6, 1877. The tumour was of six months date, and its appearance had been preceded by three months of pain. The patient was a clerk, aged 21. His strength improved after the operation, but he sought readmission in June 1878, and died in July of the same year from the effects of secondary tumours in the brain, the lungs, and the mesentery. The cerebral tumour is preserved in Series VIII. (*vide infrà.*)

The upper third of the tibia, on section, was found enormously thickened, by the growth from it of an apparently bony mass; it measured twenty-three inches in circumference; its surface was in a state of fungation. The fibula, which was not materially diseased, was pushed outwards and backwards. The knee-joint was not invaded by the tumour, but the outer semilunar cartilage was caused to project beyond its normal level.

The microscope showed that the growth had not the characters, although it possessed the naked-eye-aspect, of true bone. It exhibited a faintly fibrillated basis, true-cartilage cells, ill-formed cells, probably of osteoid nature, and irregular cavities, filled with calcareous matter, but no true bone, although an imperfect trabecular arrangement was noticed here and there.

Post-Mortem and Case Book. 1878. No. 187.

3500. Periosteal Fibro-Sarcoma connected with the Upper Part
243 *a*. of the Shaft of the Tibia.

The tumour has apparently commenced on the outer side of the leg, just below the head of the fibula. As will be seen from the section, it is a growth from the periosteum, and does not involve the bone, or the cartilages of the joint. It is distinctly lobulated. The microscopic appearances were those of fibro-sarcoma.

The growth was of two years' duration, and was attended with considerable pain. Mr. Pollock amputated through the knee joint on October 20, 1870, and the patient, a woman aged thirty-seven years, did well until November 14. She died on November 19, of pleurisy and lardaceous disease.

Post-Mortem and Case Book. 1870. No. 316.

3501. Periosteal Sarcoma connected with the Shaft of the
224 *a*. Humerus.

The patient, a gardener, about 25 years of age, had

first noticed aching pain in the arm five months before his admission. A month later, the arm was perceptibly swollen; and the swelling had increased, slowly at first, but, during the last month, very rapidly. The patient had lost flesh to a considerable extent. Mr. Pollock amputated at the shoulder-joint on June 26, 1879.

The patient made a good recovery from the operation itself, in spite of secondary hæmorrhage, which occurred on July 5, and of an oozing of blood on July 22, which was checked by the application of perchloride of iron; but the wound was slow to heal, and the granulations, which were flabby from the first, subsequently became fungoid. The last note, under date of September 3, states that the disease had recurred, and was making rapid progress. At this period the patient left the Hospital.

The tumour was large and of ovoid shape. In consistence it was of even firmness. It grew from the external surface of the periosteum. The bone was here and there slightly infiltrated, but this was not traced to any direct penetration through the periosteum. Under the microscope, the tumour consisted entirely of small cells, with a few ramifications of fibrous tissue. The disease had encroached upon the soft structures of the arm, and split up some of the muscles into separate fibres, or into small bundles of fibres.

Surgical Cases. 1879. No. 1045.

3502. 161 *a*. Spindle-celled Sarcoma of the Humerus, associated with Fracture.

The patient, a gentleman aged 40, sustained a fracture whilst riding a "buck-jumping" horse in India. Pain, shooting up the arm, had been experienced for some time (the exact period not stated) previous to the accident. The patient's grandmother had been the subject of scirrhous disease of the breast. The fracture, which was situated at the junction of the middle with the upper third of the bone, was not produced by direct violence, but as a result of the jerk of the whole frame, when thrown up in the saddle. Union took place, but the limb remained unable to lift heavy weights. An injury from a similar cause occurred six months later, but it does not appear that actual fracture took place, although severe pain was felt for forty-eight hours at the seat of the old lesion. A month later, the handling of a heavy Snider rifle again induced intense pain, which subsequently recurred on slighter efforts. In March 1878 a swelling

was first noticed; it increased, at first gradually, but, from the beginning of July, very rapidly, with marked cachexia. Amputation was performed by Mr. Holmes, on July 17, with good result; the patient's health being apparently restored.

The tumour, involving rather more than the upper third of the shaft, was of the size of a large ostrich-egg, lobulated, and of sarcomatous aspect; it could be shelled out with great ease from the surrounding tissue. Under the microscope were found coarse fibres composed of long spindles, following tolerably uniform directions; scattered columns of bright nucleated cells arranged in a coarse reticulum and evidently proliferating; a few large irregular cells, and (where these occurred) amorphous strands arranged somewhat concentrically, containing in their interstices free nuclei. The growth had invaded the medullary canal, both above and below the fracture. Firm fibrous union existed between the two fragments of the bone.

Presented by Mr. EDIS, *of Gloucester.*

3503. Myeloid Tumour of the Upper Jaw.

166 *a*. The preparation shows the left superior maxilla, to which a tumour is attached. One portion of this tumour, the size of a large walnut, is situated externally to the alveolar ledge; it extends from the canine tooth to the second molar, and presents a firm, oval, somewhat lobulated swelling. On the under surface of the hard palate is a second portion, rather smaller than the first; which extends as far back as the soft palate. The two are connected by an isthmus or bridge, which passes over and obscures the bicuspid and first molar teeth. The tumour is a solid mass, covered over by mucous membrane. The mass, on section, presents a granular appearance. Microscopically it was found to consist of well-marked "myeloid cells", with granular and fatty matter. The cells were circular, of large size, and contained from two to six nucleolated nuclei.

The specimen was removed from a woman aged 27, who eighteen months previously had received a blow on the left cheek. This was followed by the appearance of a small lump, which rapidly increased. Mr. Pollock removed the bone by two incisions in the usual manner, and the patient made a good recovery.

Surgical Cases. 1867. Nos. 994 and 1193.

3504. Myeloid Tumour of the Lower Jaw.

168 *a*. The specimen is a portion of the left side of the

lower jaw, extending from just in front of the canine tooth to the angle. Inside the bone, expanding, and in places penetrating it, is a myeloid growth, the visible surface of which has been stained with carmine.

It was removed from a hospital patient, a woman aged 46. The existing tumour was recurrent for the second time. One in a similar situation had been removed by Sir J. Paget in December 1870; a second, in a similar situation, by Mr. Pollock in 1875 or 1876; and that seen in the specimen had commenced to grow shortly after the second operation. In one of these operations all the left lower teeth behind the canine had been removed. Excision was performed by Mr. Pollock on April 22, 1880. The patient did fairly well.

Surgical Cases. 1880. No. 683 (with drawing).

3505. Myeloid Tumour of the Head of the Tibia.

164 *a.* The patient, a man aged 32, was admitted into the Hospital on January 13, 1869. He stated that about thirteen months previously he had suffered pain over the head of the left fibula; and that, five months later, he had remarked the swelling, which had increased slowly and steadily for the first two months. For the six months previous to admission its increase had been rapid, he had wasted considerably, and had suffered occasionally from hæmoptysis.

Amputation was performed by Mr. Prescott Hewett on January 21. The patient died of pyæmia on February 13.

The upper extremity of the tibia was expanded into a globular tumour of the size of a coca-nut. It did not involve the knee-joint, but was separated from it only by the articular cartilage. It terminated somewhat abruptly, just below the position of the spine of the tibia, and beyond this point the bone was healthy. The tumour was made up of three different structures. The bulk of it consisted of a greyish, gelatinous material (α), soft, elastic, and semi-transparent. This was traversed in every direction by a number of bands of pearly whiteness (β). In places these bands were collected together and formed considerable masses, which had more the appearance of fibrocartilage than anything else. In the centre of the tumour was a hard, firm, mass (γ), about the size of a walnut, resembling on section a raw turnip. This was surrounded by softened and broken down material.

Microscopic examination of (α) showed it to consist entirely of cells and free nuclei, with a little fatty and

granular matter. The cells were for the most part round or oval in shape, of large size, measuring one three-hundred and twenty-fifth of an inch, with granular contents, in which could be dimly discovered numerous nuclei. Upon the addition of acetic acid, they were found to contain from four to ten nucleolated nuclei. There were, besides, other irregular cells or cell-like masses, containing similar nuclei. Microscopic examination of (β) showed almost pure fibrous tissue; while in (γ) were seen a number of withered cells, and free nuclei, with a quantity of globules and granular matter: evidently the original myeloid tissue degenerated and fatty.

The lungs were found to be very tuberculous.

Post-Mortem and Case Book. 1869. No. 43.

3506. Recurrent Myeloid Tumour of the Scapula.

162 *a*. The tumour, which appeared to have grown from the spine of the scapula, is about the size of a coco-nut, and is smooth externally. When fresh it presented a greyish-white surface intersected by a number of bands of white fibrous tissue, and dotted over with red vascular points, resembling the "puncta vasculosa" of the brain. Microscopically it showed elongated nucleated cells, regular in shape and size, and numerous large rounded cells, each containing from six to ten nucleolated nuclei.

The specimen was removed by Mr. Prescott Hewett from a woman aged 32, who was admitted into the Hospital on October 2, 1865, with the history of a tumour, which had appeared on the left shoulder six years previously. It had been removed, but a few months afterwards the growth had recurred. Again and again was it removed, for the last time—the sixth—about seven months before her admission. It had become painful, and the patient entreated that it might be taken away. On this occasion it had much extended itself. Previously occupying a superficial position, it had now grown under the trapezius muscle, which required section and partial removal before the tumour could be reached. It had also dipped down between the clavicle and scapula, to which latter bone it was intimately adherent, and had prolonged itself upon the brachial plexus of nerves and the axillary artery. The patient soon recovered from the operation, and was discharged. It was reported that she died a few months later of acute disease.

Surgical Cases, 1865, No. 1600. *Lancet,* 1865, vol. ii, p. 537.

3507. Periosteal Carcinoma connected with the Lower End of
240 a. the Femur.

The limb was amputated at the hip-joint by Mr. Pollock on November 28, 1872. The tumour, which had been observed for four months, had appeared first on the inner side of the lower end of the left thigh; its growth had been rapid, and attended with much pain. The patient, a boy aged thirteen, recovered.

On section the tumour was seen to grow from the periosteum. The compact tissue of the bone was slightly encroached upon, but the medulla was not invaded. The growth had the ordinary characteristics of encephaloid carcinoma.

In 1873 the disease attacked the opposite femur and the patient died.

Surgical Cases. 1872. No. 1706.

3508. Carcinoma of the Lower End of the Femur.
221 a. There is a large, irregular, encephaloid mass growing from the back of the femur, and occupying the popliteal space. It projects about two inches backwards, somewhat overhanging the condyles. In front of the bone is a small rounded prominence. The structure of the lower end of the femur is largely destroyed, and replaced by the same material, but the articular cartilage and lamella appear to be intact. The growth is interspersed with numerous spiculæ of bone. Under the microscope it was found to contain well marked "cancer cells".

The specimen was removed from the body of a man who was admitted into the Hospital on June 14, 1865, with a pulsating swelling in the ham, which possessed a distinct bruit, and which, according to his statement, was caused by a strain fifteen weeks previously. As it presented all the physical signs of aneurism, pressure on the femoral artery was first tried, and, this failing, the artery was ligatured (June 30th). Ligature was followed on July 10th by severe secondary hæmorrhage, and, afterwards, by pyæmia, from which the patient died, on July 18th.

Post-Mortem and Case Book. 1865. No. 213. *St. George's Hospital Reports,* vol. vii, p. 186.

3509. Carcinoma of the Ribs.
268 b. The preparation shows the right half of the front of the thorax, from the same case as No. 3510. The continuity of the third, fifth, and sixth ribs is interrupted by growths similar to those found in the calvaria. Another

such tumour grows from the first piece of the sternum. The soft parts not forming portion of the tumours, have been removed.

3510. Carcinoma penetrating the Cranium.
268 *a*. The preparation shows the calvaria of a female, aged sixty years. A tumour of encephaloid character passes through a round opening, some ¾-inch in diameter, at the junction of the frontal with the right parietal bone, and spreads out over the inner and outer surface of the skull. The bone is eroded wherever the growth is in contact. Towards the back part of the right parietal is seen a small tumour, which protudes only on the inner aspect, but infiltrates the bone throughout. Towards the back of the left parietal, one in a still earlier stage.

Besides these cranial growths, *melanotic* masses of small size were found in the brain; and tumours of *encephaloid* structure in great abundance in the subcutaneous and subserous tissues; *i.e.*, under the skin of the trunk, neck, groins, axilla, and arms, under the parietal peritoneum, the visceral and parietal pleuræ, the pericardium and the endocardium. Several such growths perforated ribs, and appeared in the subcutaneous and subserous planes both. (See Preparation No. 3509.) Several perforated the heart-wall, and appeared in the subpericardial and subendocardial planes. One grew from the lower jaw near the left canine tooth.

The cranial tumour, microscopically, presents a mixture of round-celled sarcoma with encephaloid carcinoma.

The patient from whom these specimens were obtained was admitted into the Hospital in June 1879, with a tumour on the back, said to have grown from a congenital scaly patch. It was excised on June 26, and the patient left on July 15. The tumour presented the microscopic appearance of melanotic alveolar sarcoma. In October a swelling appeared in the left axilla, and cachexia commenced shortly after. In December a tumour recurred in the original site. The patient was readmitted in January 1880; slight cough was then present. Towards the end of February many subcutaneous tumours made their appearance, and the cough and cachexia became severe. The cerebral tumour was not perceived during life. Death occurred on March 30, 1880.

Post-Mortem and Case Book. 1880. No. 105.

3511. Carcinoma penetrating the Cranium.
268 *c*. The preparation shows the calvaria of a female, aged

forty-four years. The right parietal bone is perforated by a soft tumour, which spreads out on either surface of the skull. The thickness of the tumour at its centre is about two inches, its diameter on the outside of the skull about four inches, on the inside about half as much. The dura mater is adherent to the edge of the growth, the pericranium covers it and is intimately united. Several growths of similar character but small size are seen infiltrating the cranium from surface to surface, in other situations.

The brain was not included in the growth, but was softened and broken down in its neighbourhood. The dura mater was unusually adherent to the inner surface of the calvaria, which is seen to be rough, and to possess vascular channels of unusual depth, though the bone is not abnormally thick. No morbid growths were found in any other part of the body.

Microscopically, the cranial tumour is seen to consist of a dense fibrous stroma, enclosing nests of large multinucleated cells. It is therefore rather of "scirrhous" than "encephaloid" type. It is seen to invade the bone, and the muscular structures of the scalp.

The patient's attention had been drawn to the tumour about three years before death, but it was hardly noticeable till the last three months. Pain was absent, or nearly so, throughout. She was admitted four weeks before death. Up till then the health had not particularly suffered, but from that time she grew gradually weaker, and headache, fits of partial loss of consciousness, and strabismus, appeared by degrees. Paralysis, which was not limited to one side, followed. General loss of power proved eventually the mode of death.

Post-Mortem and Case Book. 1880. No. 230.

3512. Carcinoma of the Base of the Skull.

103 *a*. The mass is about the size of a hazel-nut. It is situated immediately behind the left posterior clinoid process, at the apex of the petrous portion of the temporal bone, and extends as far back as the internal auditory meatus.

In the recent state it was soft and brain-like in appearance, and showed under the microscope cells of every variety of form and size, mixed up with a quantity of fat globules. It had evidently commenced in the bone, which was quite soft for some distance around. It was situated under the dura mater, which was perforated at its summit. It implicated the Casserian ganglion, and under the microscope the fibres of the fifth nerve were

found to be entirely destroyed, nothing remaining but a confused mass of granular cells. It also, to a certain extent, implicated the sixth nerve as it pierced the dura mater; this nerve, however, appeared healthy under the microscope, except that some granular cells were found among its fibres. The sixth nerve on the opposite (right) side was partially softened and broken down.

Encephaloid material was found in the lungs and in the right antrum, and numerous minute specks studded the middle fossæ of the base of the skull.

The specimen was removed from the body of a woman, aged 69, who had suffered for a year with noises in the head, and for five months with paralysis of the left side of the face and ptosis of the right eye; no paralysis of the limbs, but extreme weakness, and loss of appetite. Whilst in the Hospital she was attacked with facial erysipelas, from the effects of which, apparently, she died.

Post-Mortem and Case Book. 1867. No. 250.

3513. Carcinoma of the Scapula. (Removal of the entire bone.)
203 a. The preparation shows the left scapula with an immense tumour filling up the whole of the infra-spinous fossa, and projecting below the inferior angle. The bone forming this fossa is perforated, and the tumour protrudes into the subscapular fossa. On passing the finger into the centre of the tumour the bone can be felt to be exposed and roughened, and covered over with a number of sharp spiculæ. A portion of skin has been left on the summit of the tumour; it can be seen to be ulcerated. The tumour forms an irregular, ragged cyst, with walls at least an inch in thickness; under the microscope, it gave evidence of being of a carcinomatous nature.

The parts were removed from a girl aged 16, who was admitted into the Hospital in 1865 with a painful growth connected with the scapula, which had existed for twelve months, and caused her great pain. It was hard, smooth on the surface, circumscribed, and situated in the infra-spinous fossa, to which it was firmly adherent. Soon after admission an incision was made into the tumour, and exposed bone was felt. Profuse fœtid discharge, excessive prostration, and fits of an epileptiform character followed. Next occurred a severe attack of hæmorrhage. From this the patient rallied; and she began to regain strength. The tumour, nevertheless, increased rapidly, and when it reached the size of a fœtal head, the operation of removal of the scapula was performed by Mr. Pollock.

The patient had not a single bad symptom after the

operation, the wound healing in about three weeks. She was seen three months after, and was found to have gained flesh, and to be in good health. Viewed from the front the two shoulders were level, and the only appreciable difference was slight flattening, due to wasting of the deltoid muscle. The head of the bone appeared to have a firm socket, in which it rested. It had not sunk, the two arms being exactly the same length from the tip of the acromion process. She could move the arm freely, and without pain, forwards and backwards, but there was very little power of lateral movement. The bone could be easily rotated without inconvenience, and she could use her arm freely in sewing and writing. See *Photograph* in Series XXI.

The patient was admitted again into the Hospital, eight months after the operation, with recurrence of the disease in the axilla and lungs, and died after a residence of about two months. (See preparation No. 3538, *infrà*.)

Surgical Cases. 1865. No. 167. *Lancet*, 1865, vol. ii, pages 233, 483.

3514. Cystic Tumour of the Lower Jaw.

150 *a*. The cyst is about the size of a large walnut, and has apparently been formed by expansion of the bone, probably commencing at the bottom of an alveolar pit. The portion of bone removed includes the whole of the right side of the body of the jaw from the symphysis to the angle; and nearly all of it is implicated in the cyst. The walls of the cyst are membranous, thick, and tough, with a thin layer of bone spread over them in detached pieces. Its internal surface is marked by a few somewhat prominent rugæ. It contained a thin dark-coloured fluid.

The specimen was removed from a man aged 38, who was admitted into the Hospital on November 23, 1865. He stated that in March 1864, a small tumour, which had been growing for seven or eight years, had been removed from the jaw, together with the portion of bone from which it had sprung. Shortly after this operation the present tumour had made its appearance, and it had been growing ever since. Mr. Pollock excised the parts seen in the preparation, making a longitudinal incision down the middle line of the chin. The man made a quick recovery.

Surgical Cases. 1865. No. 1878.

3515. Cystic Tumour of the Lower Jaw.

150 *b*. The specimen was successfully removed on June 28th, 1879, by Mr. Pollock, from a gentleman who had suffered

from the disease for a period of twelve years. A large portion of the bone (extending one inch to the left of the symphysis and nearly three inches to the right) was excised with the tumour.

The tumour was an elongated cystic mass, which grew from the alveolar process. It was rendered irregular at its surface, by the prominence of some of the cysts. The cysts were of various sizes, mostly small; their walls were thin, of cartilaginous rather than of bony stiffness, and their contents colloidal. The greater part of the tumour was made of a soft, opaque white, somewhat spongy-looking, substance; this material sprouted upwards as far as the level of the gum, in the position of the teeth, which had all disappeared; and downwards it attacked the dense bony tissue in a sinuous line, probably due to the early implication of the alveoli.

Under the microscope the tumour proved to be essentially cystic; in the more solid portions the cysts were lined with layers of cells showing a great regularity; in the other portions the cells showed various degrees of degeneration, ultimately resolving themselves into a perfectly homogeneous, apparently watery substance.

Presented by Mr. Geo. Pollock.

III.

DISEASES OF JOINTS.

3516. 5 *a*. Longitudinal Section through a Knee-joint, which had been laid open by Ulceration.

A large ulcer, partly cicatrized, is seen in front of the knee. The patella is wanting, and the condyles of the femur are laid bare. The semilunar fibro-cartilages are of small size, but the remaining bones and articular cartilages seem little affected.

No history. 1879.

3517. ii, 284. * Disease of the Knee-joint.

The Lower End of the Femur. The internal condyle is very much enlarged and roughened; and the articular surface much excavated by ulceration. The articular lamella is almost entirely destroyed.

The patient, a man aged 27, was admitted into the Hospital under Mr. Prescott Hewett's care, April 2, 1873,

having suffered for seven years with pain and swelling of the right knee-joint. The limb was amputated above the knee, July 24, 1873, and the patient recovered.

Surgical Cases. 1873. No. 528.

3518. Disease of the Knee-joint. Extensive Excavation of the
76 c. Head of the Tibia.

The cartilages are almost destroyed, and the articular lamellæ eroded. Just below the external tuberosity of the tibia opens a wide and deep excavation.

The patient was probably in the Hospital in 1875 or in 1876, but no reference to the case exists.

2519. Carious Cavity in the Head of the Tibia, communicating
76 a. with the Knee-joint.

* The bone is porous and wormeaten, the articular lamella eroded. A cavity in the head opens on the external aspect, and again upon the articular surface.

The patient, a girl aged 17, exhibiting marks of abscesses about the neck, was admitted into the Hospital under the care of Mr. H. Lee, July 13, 1870. The symptoms, of two months date, were those of chronic synovitis of the right knee-joint. The knee was blistered and strapped. Subsequently a sinus opened at the outer side of the joint, which led into a cavity in the head of the tibia. This was gouged out. The disease, however, progressed, and the knee-joint became the seat of abscess. On March 1, 1871, the leg was amputated through the knee-joint. The femur, being healthy, was not interfered with, nor was the patella. The stump did not heal soundly, though the health improved, and on August 1, 1872, amputation was repeated through the condyles of the femur, and the patella removed. A carious cavity was found in the centre of the patella. The patient recovered.

Surgical Cases. 1870. Nos. 1056 and 1807. 1872. No. 1133.

3520. Extensive Caries of the Ilium from Disease of the Hip-
ii,233 a. joint.

* Caries would appear to have commenced in the acetabulum, which is perforated by a large irregular cavity; the bone around is worm-eaten and porous.

No history.

3521. Disease of both Hip and Knee-joint, following an injury
65 a. to the Knee.

The articular lamella of the head of the femur is everywhere destroyed. The head is flattened on the top, owing to loss of tissue, and otherwise altered in shape.

The synovial membrane of the knee is thickened, the cartilages destroyed, and the lamellæ eroded. The acetabulum was found at the post-mortem examination to be carious, but the pelvic surface of the innominate bone was healthy.

The patient, a man aged 21, was admitted into the Hospital on September 29, 1869, and stated that he had received a kick from a horse on the right knee eighteen months previously, and that the injury was followed by much pain in the joint. He continued to work until March 1869, when he was compelled to take to bed, swelling and acute pain having set in. A few weeks before admission, he went to a bone-setter at Watford, who manipulated the knee. Soon after this, he observed swelling at the upper part of the right thigh, accompanied by pain in the hip-joint. On admission an abscess was discovered in the thigh, which communicated with the hip-joint. It was opened. On January 13, 1870, the disease having progressed in both joints, Mr. Pollock removed the limb at the hip-joint, together with a small sequestrum from the acetabulum. The patient did fairly until January 20, when pyæmia set in. He died on January 26.

Post-Mortem and Case Book. 1878. No. 33.

3522. Disease of the Elbow-Joint.

57 a. * The articular ends of the bones are unduly porous, and excavations appear on the joint surfaces.

The disease was accompanied by extensive inflammatory destruction of the soft parts. Amputation was performed by Mr. Holmes ten months after the onset, November 19, 1871. The patient, who was 70 years old, recovered from the operation; and the stump was nearly healed, when he died, apparently from heart disease.

Surgical Cases. 1871. No. 1634.

3523. Disease of the Sacro-Iliac Synchondrosis.

174. The specimen shows extensive caries of the bone, and total destruction of the cartilages. A large piece of necrosed bone is seen lying on the ala of the sacrum.

The parts were removed from the body of a young man aged 20, who was admitted into the Hospital under Mr. Holmes' care on March 30, 1870. The disease had then existed for two years. It had commenced a month after amputation of the left leg for compound dislocation at the

ankle. Death occurred on April 11, owing to hæmorrhage from the external iliac artery.

Post-Mortem and Case Book. 1870. No. 115.

3524. 76 *b.* Necrosis of the Femur extending into the lower Articular Surface. (Suppuration of the Knee-joint.)

The lower end of the femur is the seat of the necrosis, which seems to have been narrowly localised. A glass rod is passed through a sinus, which opens in front just above the knee-joint, and behind on the popliteal surface; another into a narrow sinus that opens on the joint surface. Great destruction of the joint surfaces has taken place.

The patient was a boy aged 8. The thigh was amputated by Mr. Holmes in October 1876. The patient recovered,

Surgical Case Book. 1876. No. 916.

3525. 186. Fibrous Ankylosis of the Knee-joint, in the flexed position.

The joint is shown in longitudinal section. The ankylosis is very firm. The tibia is displaced backwards and slightly outwards, and fixed at a right angle to the femur.

No history.

3526. 182. Fibrous Ankylosis of the Knee-joint, with Dislocation.

The tibia is displaced backwards and upwards, and the knee is flexed at an angle of about 130°.

The patient, a man aged 49, was admitted into the Hospital under Mr. Prescott Hewett's care, on April 3, 1872, for disease of the knee-joint. The disease was of a year's duration; and the joint was ankylosed as seen, so that the limb was useless. Amputation was performed on April 17, and the patient died from secondary hæmorrhage on the tenth day.

Post-Mortem and Case Book. 1872. No. 99. *Amputation Book.* 1872. No. 13.

3527. 179. Extensive Bony Ankylosis between the Femur, Tibia, and Patella.

The articular ends are greatly enlarged, and solidly united by masses of new bone. A passage is left open between the condyles of the femur. In the new bone to the outer side of the passage is a cavity containing a loose sequestrum.

Thirty years before admission an abscess had formed about the knee, from which the patient recovered, with a

somewhat stiffened joint. Twenty years later the abscess formed again. After eight months' severe pain, with wasting, the patient was admitted under Mr. Pollock's care, August 31, 1870. The left knee was enlarged, flexed, and ankylosed, and several sinuses led into the joint, from which foul pus escaped. He suffered acute pain. Mr. Pollock amputated on September 8, 1870. The man eventually made a good recovery.

Surgical Cases. 1870. No. 1373.

3528. Bony Ankylosis of the Hip-joint in an unnatural position,
111 *a.* the Femur being directed forwards and upwards.
* Union is by bone and quite complete. The specimen was removed from the body of a man aged 23, who had suffered from disease of the hip for fifteen years. Bone was still exposed at the bottom of sinuses about the hip when he died.

Post-Mortem and Case Book. 1869. No. 29.

3529. Bony Ankylosis of the Ankle-joint.
154 *a.* The tibia and fibula are seen united to the astragalus.
* The bones are soft and porous, and there is a sinus running through the point of junction of the astragalus and tibia.

The specimen was removed from the amputated limb of a boy aged 19, who had suffered for a year and a half from disease of the ankle-joint. An abscess had formed about the joint six or seven years before, but had healed. Amputation was performed by Mr. Prescott Hewett, April 29, 1869. The boy did well.

Surgical Cases. 1868. No. 1672. 1869. No. 596.

3530. Bony Ankylosis between the Atlas and the Condyles of
95 *a.* the Occipital Bone.
* No history.

3531. Bone removed in Excision of the Knee.
176. The patient was a boy aged 11. Excision was per-
* formed for disease of seven months date by Mr. H. Lee on July 21, 1870. The wound healed well by September 28, with firm union of the bones.

Surgical Cases. 1870. No. 922.

3532. Portion of the Femur, including part of the Diaphysis, re-
166. moved in Excision of the Knee.

The patient was a boy aged 7. There is no history of the disease. Excision was performed by Mr. H. Lee, March 14, 1867.

The specimen has been prepared by a vertical section, so

as to show the interior of the bone. The line of excision is seen to have been carried about half-an-inch above the epiphysial cartilage. A sinus runs down the axis of the diaphysis and then horizontally through the epiphysis, opening in two places into the knee-joint.

With the loss of the epiphysial cartilage, the growth of the femur ceased, and at the age of 20, the patient's left foot was on a level with his right knee.

A drawing of the preparation is preserved in Series XXI. *Surgical Cases.* 1867. No. 173.

3533. 169. Lower End of the Femur from a case of Excision of the Knee.

The specimen was removed from a boy who had suffered from disease of the knee-joint for two years, and who, when admitted, exhibited ankylosis, and partial dislocation, with a sinus discharging on the outer side of the thigh. Excision was performed by Mr. Holmes, February 13, 1868. The boy made a good recovery, but on his discharge there was considerable shortening of the limb.

A wedge-shaped portion only of the bone is shewn in the preparation. It formed a part of the condyles of the femur. In the inner condyle is a cavity the size of a bean, which, in the recent state, was full of pus: the cartilages are much eroded, and the bone roughened.

Surgical Cases. 1868. No. 206.

3534. i, 226 *a*. The Bones of the Knee-joint, nine months after Excision of the Knee.

In the preparation it will be seen that the patella has been removed, as well as a considerable portion of the articular surfaces of the tibia and femur. The bones are firmly soldered together; the posterior part of the femur being wedged into the centre of the section of the tibia, so that the two bones are united at a somewhat obtuse angle. The lower end of the femur overhangs the anterior border of the tibia by about an inch, and passing from the one point to the other in this situation are dense and strong bands of fibrous tissue. Behind, the tibia projects, to a similar extent, beyond the posterior surface of the femur. In this situation the end of the tibia is somewhat softened and carious. The bones are firmly ankylosed, partly by fibrous, partly by osseous tissue.

The patient, a girl aged 16, from whom the specimen was taken, was admitted into the Hospital with acute abscess of the knee-joint, supervening on old chronic disease of two years' standing. Excision was performed, but she did not go on very well, and about three months later she was sent

into the country, the wound not yet being healed. She was re-admitted three months afterwards with several sinuses in the neighbourhood of the knee. She died gradually in about three months, of lardaceous disease of the viscera.

Post-Mortem and Case Book. 1867. No. 6.

3535. Bone removed in Excision of the Hip.

167. The portion of bone consists of the head, neck, and great trochanter, the section having been made immediately above the lesser trochanter. The cartilage has entirely disappeared from the head of the bone, and the osseous surface is roughened.

The specimen is from a girl aged 14, who was admitted into the Hospital with symptoms of hip-joint disease of uncertain date. Abscess had not yet formed. She suffered, however, intense pain, and as she did not improve under treatment, the joint was excised by Mr. H. Lee, June 6, 1867. She made a fair recovery; but five months after the operation, she was still unable to walk without crutches, and a sinus was open in the thigh.

Surgical Cases. 1867. No. 469.

3536. The Head of the Humerus, Excised during life.

153 *a*. * The bone is most extensively diseased. In the recent state it was infiltrated throughout with pus. It has been macerated, and is now dry. The articular lamella and large portions of the cancellous tissue have disappeared.

The specimen was removed from a man aged 26, who had suffered for four months from abscess in connection with the shoulder-joint. The operation was performed by Mr. H. Lee, July 26, 1866. The head of the bone was sawn off, after having been turned out of its socket through a horizontal incision. The glenoid fossa was unaffected. The man did not make a good recovery. He remained in the Hospital eleven weeks, and when he was discharged at the end of that time, the wound was still unhealed, and he was suffering considerable pain.

Surgical Cases. 1866. No. 1113.

3537. The Head of the Humerus, Excised during life.

153*c*. The articular cartilage and lamella are destroyed and the bone is extensively carious.

It was removed from a man, aged 25, admitted on April 10, 1872. He had suffered dislocation of the shoulder four years before, and since then the arm had been weak; he had experienced pain in the joint for six months, having, he said, strained his arm. The head of the bone

was excised by Mr. Pollock on June 20, 1872. The glenoid cartilage was found to be slightly ulcerated. The patient was discharged on December 31, 1872. He was beginning to use the arm, but the sinus was unhealed.

Surgical Cases. 1872. No. 523.

3538. The parts after Removal of the Scapula.

163. The preparation shows the head of the humerus imbedded in a cavity, which has been formed by the clavicle and the coracoid and acromion processes of the scapula, which were left at the time of operation. The acromion will be seen to be somewhat depressed, and the head of the humerus to be resting against it, whilst in front the head is embraced by the coracoid and the acromion, and an arch completed by a dense coraco-acromial ligament, so that a complete socket is formed. The whole is invested by a tough fibrous capsule, and thus a perfect joint is obtained. The muscles around the joint, namely, the posterior part of the deltoid, the lower part of the trapezius, the serratus magnus, and the rhomboidei, are completely wasted, the muscular substance being replaced by fibrous tissue. The anterior portion of the deltoid has been cut away, in preparation, in order to show the joint.

The recurrence of the original disease for which the scapula was removed is seen in the form of three large cysts. One of them, the largest, in the axilla, between the clavicle and the humerus, is of about the size of a fœtal head; upon the front of it the axillary artery and brachial plexus ramified. A second is contained in the triceps muscle; and a third in the subclavian triangle. In the recent state these cysts contained a thin, dark coloured, bloody fluid, mixed with an encephaloid material, which presented, under the microscope, well marked "cancer cells".

The early history of the case which furnished this preparation is given in connection with the diseased scapula, No. 3513. The operation of removal having been performed on July 27, 1865, the patient was readmitted into the Hospital on May 16, 1866, with a large tense swelling filling up the whole of the axilla. This mass continued to increase, and became soft and fluctuating. On the 14th of July she was seized with dyspnœa. She rapidly sank, and died four days later. At the post-mortem examination, a large collection of pus was found in the right pleural cavity, the right lung was almost entirely replaced by encephaloid material, and smaller growths were seen in the left lung.

Post-Mortem and Case Book. 1866. No. 206.

3539. 60 a. Lower End of the Humerus, with the Olecranon Process, removed by Subperiosteal Excision.

The patient, a boy aged 10, was admitted into the Hospital on October 16, 1868, with an abscess of the elbow-joint, the result of a wound, extending into the joint, two weeks and a half before. There was considerable discharge from the wound. On November 2, Mr. Holmes found the head of the radius lying loose, and took it away. On November 19, he removed the parts preserved by an incision about four inches long at the back of the joint. The periosteum was dissected off with but little trouble, and the end of the humerus, with the olecranon process, was removed. The cartilages were almost entirely destroyed, and the ends of the bone much roughened. The joint was full of pus. The patient made a good recovery.

Surgical Cases. 1868. No. 1643.

3540. 164. Remains of an Elbow-joint seven months after Excision.

A section has been made, and the end of the humerus is seen to be firmly united to the ulna by fibrous tissue. Both of these bones are much thickened posteriorly by loose bony deposit, so that the compact tissue of the shaft is seen to run through about the centre of the bone. In the middle of the shaft of the ulna is a little cavity, about the size of a pea, which has been coloured with carmine in preparation, and in this cavity a minute sequestrum of bone lies loose.

The specimen was taken from the amputated arm of a girl aged 21. In July 1863, she fell down and struck the limb. A month later an abscess formed in the middle of the forearm. It remained open for four or five months, and when it healed, according to the patient's statement, the elbow-joint became stiff. Soon after this she became an out-patient of the Hospital; it was then very evident that the abscess had nothing to do with the elbow-joint, and that she was suffering from an hysterical affection of that articulation. She steadily asserted that she was unable to use the joint; but when she was placed under the influence of chloroform, the forearm moved quite readily on the arm, and there was found to be no disease of the articulation. She persisted, however, in keeping it fixed, and after a time she was lost sight of. When she applied again for advice in November 1864, fibrous ankylosis was found to have taken place. She was anæsthetised, and forcible extension applied: this was followed by inflammation and total destruction of the

joint; and it became necessary, in June 1866, to excise the ends of the bones. The operation was performed by Mr. H. Lee. It was succeeded by a sharp attack of phagedæna; and after the wounds had healed, the patient complained of the most intense pain, especially at night, preventing sleep, and so wearing her out, that she chose to have the limb removed, rather than continue suffering as she did. Amputation in the lower third of the arm was accordingly performed in January 1867.

3541. Corresponding section to the preceding.
165. *Surgical Cases.* 1867. Nos. 722, 1584, 2076.

3542. Remainder of the Humerus from the same patient.
165 *a*. She was readmitted in March 1869, with pain in the stump; and finally, as she was out of health, and appeared to be suffering from the effects of the pain, Mr. Henry Lee removed the rest of the humerus, April 8, 1869. The bone is quite healthy. The patient made a good recovery.
Surgical Cases. 1869. No. 468.

3543. A New Joint formed after Excision of the Elbow.
185. The humerus has been divided through the upper limit of the olecranon fossa: the ulna through the base of the olecranon process. The head of the radius has been removed, and its shaft is prolonged into two processes about half-an-inch in length, one of which articulates with the ulna. A strong ligament connects the outer of these processes with the termination of the outer border of the humerus. The ends of the humerus and ulna are rounded. They are held together by three ligaments, of such a length as permits the separation of the bones to the extent of three-quarters of an inch. The largest of these ligaments passes from the inner half of the posterior surface of the lower end of the humerus, to the posterior surface of the base of the olecranon process of the ulna: a second smaller one passes from the anterior surface of the lower end of the humerus, at the termination of its inner border, to the most internal part of the upper end of the ulna; and a third consists of a round band passing between the anterior edge of the remains of the coronoid process of the ulna, and the anterior surface of the lower end of the humerus, an inch above the coronoid fossa.

The specimen was removed from the body of a woman aged 54, who died of dropsy, the day after admission into the Hospital. She was friendless, and no information could be obtained concerning the date or cause

of the excision; but it was observed before death that she used the forearm freely, so that no defect was suspected.

Post-Mortem and Case Book. 1874. No. 101.

3544. Bones of the Wrist-joint, removed by Excision.
153 *b.* The preparation shows the lower ends of the radius
* and ulna, and all the carpal bones except the trapezoid and half of the trapezium, which were entirely destroyed by the disease. In the recent state the cartilages covering the remainder were gone, and their articular lamellæ eroded.

The specimen was removed from a man aged 23, who had run a chisel into his wrist-joint: inflammation and total destruction of the carpal joints followed. Excision was performed by Mr. H. Lee, in 1866. The patient remained in the Hospital three months after the operation, and left with a comparatively useful arm.

Surgical Cases. 1866. No. 324.

3545. Portions of the Tibia, Fibula, and Astragalus, removed in
189. Excision of the Ankle-joint.

Excision was performed by Mr. H. Lee for compound comminuted fracture extending into the joint, January 27, 1875.

Surgical Cases. 1875. No. 151.

3546. Carious Os Calcis, removed by Excision.
172. The patient was a girl aged 18. Excision was performed
* by Mr. Holmes on May 27, 1869, for disease of a year and a half's duration. Portions of the bone had been gouged away on two previous occasions. The patient made a good recovery.

The bone is excessively porous. Several deep excavations, the result of the former operations, are seen. The articular lamellæ are intact.

Surgical Cases. 1869. No. 424.

3547. Section of a Foot, shewing the Results of Sub-periosteal
190. Excision of the Os Calcis, three years after the Operation.

The calcaneum was excised by Mr. Holmes on January 31, 1874. The patient was a boy aged 17. Considerable local inflammation followed, and it was not until January 1875, that he was able to bear his weight on the limb. At that period the ankle-joint was completely ankylosed. Subsequently, the power of locomotion was restored;

but the gait was awkward, and the foot unsightly. Nevertheless, the patient was enabled to earn his living as a porter, in the Hospital. He died in April 1877, of phthisis.

The section has been made through the tibia and foot, ending between the first and second toes. Bony ankylosis is seen between the tibia and the astragalus, and between the astragalus and the other tarsal bones. No vestige remains of any of the joint structures, with the exception of a thin plate of cartilage on the posterior surface of the astragalus. The tendo Achillis terminates in a small thin bony mass, consisting of two distinct halves connected by fibrous tissue. Into this bony mass are inserted, in front, the superficial plantar muscles. Double proof is thus afforded, that the calcaneum had really been restored, although in a stunted form. This diminutive os calcis is slightly moveable, although it has fibrous connections with the astragalus.

Surgical Cases, 1874. No. 70. *Medical Cases*, 1877. No. 345. *Clin. Soc. Trans.*, vol. viii, p. 77, and vol. xi, p. 117.

3548. 141 *a*. A portion of one Semi-lunar Cartilage, removed from the Knee.

A man aged 25 had fallen in the act of kicking during a game of football. The accident was followed by much swelling and by loss of motion. Six weeks afterwards the presence of a loose body in the joint was detected. An attempt was made to remove it subcutaneously, but unsuccessfully, as there were some ligamentous adhesions which it was necessary to divide. It was therefore cut down upon and removed. Recovery was perfect.

The specimen showed under the microscope both ligamentous and cartilaginous tissue.

Path. Soc. Trans., vol. xviii, p. 214. *Presented by* Mr. B. E. Brodhurst.

3549. 135 *a*. Osteo-Arthritis of the Knee-joint.

The preparation shows the left knee-joint opened from the front. All the articular surfaces are affected by the disease in an early stage. The semilunar fibro-cartilages have been nearly destroyed, the articular cartilages are absent, except at the edges, the bone they should cover is eroded and rough, and the borders of the articular surfaces are slightly extended outwards in flanges.

The specimen was taken from the body of a man aged 75, who died of pericarditis and pleurisy, resulting from

granular degeneration of the kidneys. No clinical information was obtained respecting the articular affection.
Post-Mortem and Case Book. 1880. No. 313.

3550. Ankylosis of the Tarsus: probably from Osteo-arthritis.
187. No history.
*

3551. Ankylosis of the First Metatarso-phalangeal joint, apparently from Osteo-arthritis.
188. No history.
*

IV.

DISEASES OF MUSCLES, TENDONS, AND BURSÆ.

3552. Talipes Equinus.
22. Dissection showing the position of the tendons.
The specimen was taken from a subject aged 72, brought into the dissecting-room.

3553. Talipes Varus in an Infant.
26. Dissection showing the position of the bones.
Presented by Mr. WARRINGTON HAWARD.

3554. Congenital Talipes Equino-Varus.
23 *a*. Dissection showing the position of the tendons.
Presented by Mr. WARRINGTON HAWARD.

3555. Equino-varus in a New-born Infant at the ninth month.
23. The bones of the leg and foot, denuded of muscle and
* tendon.

3556. Clubbed condition of the Fore-limb of a Hare.
24. The flexor tendons are much contracted, so that the
* metacarpal bones form a right angle with the radius and ulna.
During life, owing to this condition, the animal, when he ran, rested the weight of the body on the carpal bones. The wrist-joint is covered with immensely thickened cuticle, and a bursa interposed between the skin and the joint. It appears to have been a congenital condition: both fore-legs were affected, and there was no wound or scar denoting an injury. The hind-legs were perfectly natural.

The hare was shot by a gentleman, who states that he noticed something very peculiar in its gait, and that its hind quarters were thrown very high. It was able, however, to get over the ground at a very considerable speed.

3557. The other Fore-limb from the same Hare, dissected.
25. *Presented by* Mr. F. S. CLARKSON.

3558. Calcareous Plate in the Diaphragm.
27. The specimen was taken from the body of a man aged 56, who died of pneumonia, after fracture of several ribs. Both pleuræ were universally adherent. The lower part of the left pleura, and the left extremity of the diaphragm, were converted into broad calcareous plates, about 5 ins. by 3 in size.

Post-Mortem and Case Book. 1878. No. 73.

3559. Scirrhus of the Pectoral Muscles.
4 *a*. A section of the right mamma and subjacent tissues. The muscular layer is replaced by scirrhous tissue, the mammary gland being unaffected, though separated from the muscle only by a little areolar tissue.

The specimen was taken from the body of a woman aged 66, admitted on June 24, 1869, under Mr. Holmes' care, with a tumour on the right side of the chest. She died on July 24.

Post-Mortem and Case Book. 1869. No. 224.

3560. Two Ganglia in the neighbourhood of the Wrist.
13 *a*. One of the ganglia may be seen in front of the joint, between the tendon of the flexor carpi radialis and that of the supinator longus, immediately beneath the radial artery —which has been injected. This ganglion has been laid open, and will be seen to communicate directly with the synovial sac of the wrist joint, between the scaphoid bone and the radius. The other ganglion is at the back of the joint, and is developed from the sheaths of the extensor tendons, without having any communication with the joint.

The specimen was taken from the body of a woman aged 55, who died in the Hospital, of pyæmia.

Post-Mortem and Case Book. 1866. No. 96. *Path. Soc. Trans.*, vol. xviii, p. 274.

3561. Numerous small loose Bodies, like grains of rice, removed
13 *b*. from a Ganglion situated among the Extensor Tendons of the Wrist.

Presented by Mr. GEORGE HARRISON.

3562. Melon-seed Bodies removed from a Palmar Ganglion, in a
13 *c*. case of Mr. Pollock's, January 1, 1880.

3563. Enlarged Bursa Patellæ, removed by Operation.
12 *a*. The sac is of the size of a Tangerine orange; its wall is thin and smooth on the interior. It was removed from a woman aged 64, after six months' growth, by Mr. Holmes, Nov. 19, 1868.

Surgical Cases. 1868. No. 1783.

3564. Enlarged Bursa Patellæ, removed by Operation.
12 *b*. The bursa is of the size and shape of half a Tangerine orange. Its walls vary from one-eighth to three-eighths of an inch in thickness. The cavity is occupied by a fibrinous network.

The patient, a housemaid, aged 19, had noticed the swelling for quite a year. It had been painful latterly. It was removed by Mr. H. Lee, July 6, 1876.

Surgical Cases. 1876. No. 954.

3565. Enlarged Bursæ Patellæ, removed by Operation.
14 *b*. One of the bursæ is as large as half an orange, the other somewhat smaller. Their walls are greatly thickened, extremely dense and tough. Their cavities contain a little fibrinous coagulum. In the recent state they were filled with old and decolorized blood.

They were removed on May 26, 1870, from a woman aged 34, by Mr. H. Lee. The enlargement had existed for two years.

Surgical Cases. 1870. No. 744.

3566. Suppuration in an Enlarged Bursa.
14 *a*. The sac is not of unusual size, but its walls are greatly thickened. In the recent state the cavity was full of pus.

No history.

V.

DISEASES OF THE SPINE.

3567. Caries of the Atlas and Axis.

15 *b*. The lateral masses of the atlas are extensively destroyed, and the tubercles for the attachment of the transverse ligament quite gone. The superior articular processes of the axis are greatly, the left almost entirely, worn away. The odontoid process is reduced to half its natural size. The posterior ligaments remain intact, but the transverse and check ligaments have been completely destroyed.

The specimen was taken from the body of a boy aged 8, a patient in the Hospital for Sick Children, under Mr. Haward. Symptoms referable to the affection of the vertebræ were present for sixteen or seventeen months before death, but examination, repeated on several occasions, failed to give certain evidence of spinal disease. Death occurred from tubercular meningitis.

Clinical Society's Transactions, vol. viii, p. 7. *Presented by* Mr. WARRINGTON HAWARD.

3568. Ulceration of the Transverse Ligament, in consequence of

15 *a*. Caries of the Cervical Vertebræ.

Death had resulted from dislocation of the head forwards, accompanied by profuse hæmorrhage, which had extended beneath the arachnoid of the brain and spinal cord, and into the third and fourth ventricles of the former.

The preparation shows the four upper cervical vertebræ, together with a portion of the spinal cord *in situ*. The anterior arch of the atlas is seen to be carious. The odontoid process is also carious, and the transverse ligament (in front of which two bristles have been placed) is ruptured. A small piece of necrosed bone lies between the bodies of the third and fourth vertebræ, but neither of these vertebræ is more than superficially carious. A thick coagulum of blood surrounds the spinal cord.

The specimen was taken from the body of a woman aged 40, who was admitted into the Hospital under Dr. Fuller's care on August 24, 1870, with a history of pain in the neck and back of the head, of three months' duration. She was unable to move her head without the aid of her hands, she suffered great pain in the occiput and neck, and in the throat during the act of deglutition. Her speech was thick and indistinct. On August 27, it was

noticed that the cervical glands were enlarged. The pain in swallowing had increased. On the 29th, pain in the occiput and neck was aggravated, and she was unable to move her head. In the evening, while she was sitting up and taking her tea, a rigor occurred, and in ten minutes' time the patient turned upon her side and was dead.

Post-Mortem and Case Book. 1870. No. 237. *Path. Soc. Trans.*, vol. xxii, p. 188.

3569. 60. Caries of the Dorsal Vertebræ: Pressure on the Spinal Cord and consequent Paraplegia.

The preparation shows the seven upper dorsal vertebræ in section, the spinal canal, and its contents. The contiguous portions of the bodies of the third and fourth dorsal vertebræ are partially destroyed, and the intervertebral substance completely so. A mass of thickened purulent exudation projects forwards from the bodies and sides of these vertebræ, and backwards into the spinal canal, causing pressure on the corresponding part of the spinal cord. The cord at the spot is diminished in size, and somewhat softened. The dura mater is apparently healthy.

The specimen was taken from the body of a woman aged 60, who was admitted into the Hospital for paraplegia of three months' standing, and who died suddenly. Examination of the spine during life failed to afford evidence of vertebral disease.

Post-Mortem and Case Book. 1867. No. 292. *Path. Soc. Trans.*, vol. xix, page 16.

3570. * Caries of the Dorsal Vertebræ: Ankylosis.

The bodies of the eight lower dorsal vertebræ, and that of the first lumbar, are extensively destroyed. Their remains are fused into a solid column of bone about three inches in length. This column is curved into a semicircle, so as to bring the body of the fourth dorsal vertebra within three-fourths of an inch of the second lumbar. The lamellæ and spinous processes are little affected by the disease. Here and there adjacent ones are ankylosed. Some of the ribs are similarly united to the bony column.

No history.

3571. * Osteo-Arthritis of the Atlas and Axis.

The anterior portions of these vertebræ, including their articular surfaces. The odontoid process is lengthened by an irregular outgrowth of bone. Its articular surface, and the corresponding surface of the atlas, are slightly

eroded. The edges of the latter are extended into irregular flanges. The edges of the other articular surfaces show this last peculiarity only in slight degree.

No history.

3572. 31 *a.* * Ankylosis of Vertebræ, probably from a case of Osteo-Arthritis.

No history.

3573. 41 *b.* * Syphilitic Necrosis.

A large portion of the body of the fourth cervical vertebra, exfoliated fourteen years after infection with syphilis. At the lower end is seen the impression of the cartilage; to the upper is attached a piece of the cartilage and a fragment of the adjoining vertebra.

The patient, a man aged 40, was under Dr. William Ogle's care in 1869. The fragment seen in the specimen was removed from the pharynx by the patient himself, a few months after the commencement of the symptoms, which had caused him so little trouble that he could hardly be persuaded to place himself under treatment.

3574. 41 *a.* Syphilitic Necrosis.

Two additional portions of fibro-cartilage, exfoliated in the same case, together with fragments of bone, four months after the fragment shown in preparation No. 3573.

The patient eventually recovered perfectly.

Medico-Chirurgical Transactions, vol. lv, p. 139.

3575. 46 *a.* Hydatids developed in the Sacrum.

A cyst with bony walls has been developed in connection with the right half of the sacrum, and appears on its posterior surface. In the recent state the cavity was full of hydatids, some of which may still be seen in a shrivelled state. In addition to the hydatids several small pieces of necrosed bone were found, and a little thin pus. An exit for the pus had been provided by a small rounded opening, which is seen in the specimen. Numerous hydatid cysts lay among the deep muscles of the back, and those of the false-pelvis. One or two such excavations are shown in the preparation.

The patient, from whose body the specimen was taken, was a butcher aged 59. Sixteen months before his admission on February 22, 1870, a swelling had appeared over the back of the right thigh. It increased; and burst three months before he became an in-patient. On admission, much pus was being discharged from an opening

about four inches below the great trochanter; the skin over the sacrum, and over a great part of the ilium was undermined. On March 10, Mr. Pollock slit up the sinus, and removed several pieces of bone. On March 20 the patient died of pneumonia.

Post-Mortem and Case Book. 1870. No. 97.

3576. Spina Bifida.
61. The sac is of the size of a hen's egg. It occupies the whole of the dorsal and the upper part of the lumbar region of the spine. It has been laid open from behind, and the nerves are displayed ramifying on the wall of the cyst.

No history.

3577. Spina Bifida, connected with nearly the whole length of
59. the Spine.

The dorsal, lumbar, and sacral vertebræ are shown. With the exception of the three upper dorsal, the laminæ of all these vertebræ are deficient. The tumour consists of two cysts, perfectly distinct from one another: the upper one is twice as large as the lower one; on its internal surface the spinal nerves may be seen ramifying. In the lower may be observed the termination of the spinal cord, and the cauda equina. The cyst-walls are extremely thin, so that it has been impossible to dissect the skin off them.

The specimen was taken from the body of a child aged six months. During life there was very little, if any, movement in its legs. A large semi-transparent bladder extended the whole length of the dorsal region. This bladder looked as if it would burst, and the skin around it was irritable. The child, for the whole six months of its life, was in a miserable, sickly condition, and was the subject of hydrocephalus.

Presented by Mr. Henry Lee.

3578. Spina Bifida.
62. The preparation shows the tumour alone. It was amputated during life. It consists of two sacs, one of about two drachms, the other of about four drachms capacity. Each possesses a separate orifice of communication with the spinal canal. The lining membranes are smooth, and no nerves appear in the walls.

The specimen illustrates a case in the practice of Mr. Holmes, who gives the following account:—

"The patient was a male infant, five months old. The

tumour (congenital, of course) was situated over two of the lowest lumbar vertebræ. It was freely moveable, and increasing rapidly. The skin was somewhat ulcerated at the top. It had burst once or twice, discharging some clear fluid, with apparent relief to the child. When the tension became considerable, and the child seemed to suffer from the pressure of the clothes, the mother used to prick the tumour with a needle, and evacuate some clear fluid; which seemed to benefit the child.

"No pedicle could be felt. The spines of the vertebræ were perceptible below the tumour, and appeared healthy.

"I saw the child on two occasions, at the interval of about a fortnight; and verified the fact that the tumour was rapidly growing. Under the circumstances, I thought an operation justifiable; being very uncertain whether there was any communication with the vertebral canal or no.

"At the operation, which was done under the carbolic spray, when the pedicle was divided, a gush of clear fluid occurred, and the child suddenly turned very faint. It was soon rallied, and the wound was dressed antiseptically. Next day it seemed pretty well, but the napkins were stained dark purple, as if from carbolic poisoning. The carbolised dressings were removed. The pulse was good, the child took the breast, and did not seem in much pain. The mother sat up with the child most of the night, during which it seemed occasionally in pain, but went on fairly well. She went to bed in the morning, leaving the child asleep, and the father watching it. It died very suddenly, almost before he was aware.

"I was only allowed to inspect the wound, and could only ascertain that a canal led down between two spinous processes into the spinal canal."

Presented by Mr. Holmes. 1880.

VI.

DISEASES OF THE HEART AND CIRCULATORY APPARATUS.

3579. Calcified Pericardium.

8 *a.* The pericardium is universally adherent. A thick ring of fibro-calcareous material lies in the auriculo-ventricular sulcus. It is continuous, with the exception of an interval of about half an inch in the situation of the descending branch of the left coronary artery. Its width is from three-quarters of an inch to an inch and a half. Its thickness is slight at the margin, but considerable in the middle. Its external surface is tolerably smooth, and clothed with fibrous tissue, which is adherent to the parietal pericardial layer, but its internal surface is very uneven and knobbed. The muscular tissue is protected from it by a quantity of soft fat (much has been removed in preparation). The heart is somewhat atrophied.

From the body of a man aged 64, who died in the Hospital of cirrhosis and chronic pneumonia. There was a history of an attack of rheumatic fever, fifteen years previously. The heart sounds were indistinct, the dull-area and apex-beat natural.

Post-Mortem and Case Book. 1879. No. 306.

3580. Tubercle of the Pericardium.

4 *a.* The pericardial layers are greatly thickened, and universally adherent by fibroid tissue. Amid this fibroid tissue, and in the layers, white nodules, about half the size of peas, are seen. The microscope shows caseous masses, apparently originating from tubercle.

From the body of a man aged 34, who died in the Hospital of general tuberculosis, after twelve months' symptoms. He was in the Hospital only thirteen days.

Post-Mortem and Case Book. 1877. No. 326.

3581. Cysts attached to the Pericardium.

263. The cysts, three in number, are attached to the inner surface of the pericardium, just at the point of its reflexion upon the aorta. The largest, when fresh, was of the size of a hazel-nut. The walls of the cysts are of thin semi-transparent material; their contents were a clear colourless fluid.

From the body of a woman aged 45, who died in the Hospital, of phthisis.

Post-Mortem and Case Book. 1874. No. 56.

3582. Unusual shape of the Left Auricular Appendix.

71 *a.* The appendix forms a narrow cone about three inches in length, which is bent twice on itself at a sharp angle, and is clubbed at the tip.

From the body of a woman aged 43, who died in the Hospital.

Post-Mortem and Case Book. 1878. No. 20.

3583. Patent Foramen Ovale.

69 *a.* The preparation shows portions of both auricles, and the interauricular septum with the patent foramen, which measures an inch and three-quarters. The whole heart weighed eight ounces: both ventricles were hypertrophied.

From the body of a girl aged 10, who died in the Hospital. She had suffered all her life from coughs, palpitation, and blueness of the lips on exertion, but the symptoms had not been severe enough to attract attention till four months before death.

The heart's impulse during life was reduplicated. It was felt in the fifth left space, in the anterior axillary line, and forcibly in the epigastrium. A blowing systolic murmur was heard over all the cardiac region, culminating in the epigastrium.

Post-Mortem and Case Book. 1880. No. 101.

3584. Malformation of the Heart.

250 *a.* Of the two ventricles, the right is by far the larger, and gives origin both to the aorta and to the pulmonary artery. The septum is imperfect, a large irregular opening giving access to the left ventricle. This opening is so placed with regard to the left auriculo-ventricular aperture, that the current from the left auricle would, for the most part, flow into the right ventricle. A plain glass rod is placed to indicate its course. The right auriculo-ventricular aperture (indicated by a green rod) is of large size. The pulmonary artery opens from the right ventricle by a short channel, which passes over the inter-ventricular foramen.

From the body of a child aged 8 months, who was brought to the Hospital as an out-patient, with extreme dyspnœa and cyanosis. No murmur could be heard, and the lung-sounds were natural. The mother stated

that the child had suffered from cough and dyspnœa, with blueness of the surface, from birth. It died a few days after it was first seen. At the post-mortem examination, there was much thick mucus in the trachea and bronchial tubes, some of which were dilated. The lungs and other organs were natural.

Presented by Dr. DICKINSON.

3585. Malformation of the Heart.

261. The foramen ovale is patent, and the pulmonary artery almost occluded at its origin. The cavities are as large, and their walls as thick, as those of an adult heart; the wall of the right ventricle is nearly as thick as that of the left. The tricuspid flaps are thickened, and display some small vegetations.

From the body of a girl aged 13, who had suffered from attacks of cardiac pain for six years, of cyanosis for two years, before death. Till her eighth year she had appeared perfectly healthy. She died of pericarditis. No endocardial murmur was heard during life, but the first sound had a peculiar metallic twang.

Medical Times. 1871. Vol. ii, p. 526. *Presented by* Dr. SUTHERLAND.

3586. Malformation of the Heart in a case of Joined Twins.

250 *b.* There are two hearts in the preparation, joined together by the union of the left auricle of the one with the right auricle of the other. At the point of junction these cavities communicate. The heart which is on the right in the jar (the larger of the two) is natural in every respect, except for the communication above alluded to. The smaller heart consists of a single ventricle, and two auricles, which communicate by a large foramen ovale. The ventricle communicates with the left auricle, and from it springs a well-formed aorta. The pulmonary artery is rudimentary, and terminates in a *cul-de-sac* behind the aorta.

The preparation is from a case of joined twins preserved in Series XVIII (*vide infra*).

3587. Gun-shot Wound.

14 *c.* The apex has been extensively lacerated, and the cavity of the left ventricle laid open. A clean round hole is seen at the back of the heart, near the apex of the right ventricle.

From the same case as Preparation No. 3458.

Post-Mortem and Case Book. 1869. No. 321.

3588. Fibroid Growths in the Walls of the Heart.
38 *a.* Tough, whitish nodules appear in the muscular walls of the ventricles. Microscopically, they were shown to consist of fibroid tissue, and to have grown from the connective tissue between the muscular fibres.

From the body of a man aged 50, brought into the Hospital after death. Besides an old vomica and some encysted caseous masses in one lung, no other serious lesion was found. Scars on the glans penis and the legs suggested a syphilitic origin for the nodules.

Post-Mortem and Case Book. 1872. No. 13.

3589. Fibroid Growths in the Walls of the Heart.
260. Patches of fibroid tissue are seen invading and replacing the muscular structure in all parts of the heart-walls, the apices of the musculi papillares of the mitral valves being especially affected. The growth is densest in the subendocardial layers. Microscopically, it is indistinguishable from normal fibrous tissue, and, at the edges of the patches, it is seen to fade gradually into the muscular structure.

From the body of a gentleman aged 29, who fell dead from his horse in Hyde Park. No symptoms of heart-disease had been noticed. There was no evidence of syphilis.

Post-Mortem and Case Book. 1870. No. 111. *Path. Soc. Trans.*, vol. xxi, p. 115.

3590. Fibroid Growth in the Walls of the Heart, the result of
34 *a.* extravasation of blood.

The patient from whose body the specimen was taken, a woman aged 41, died in the Hospital from cerebral softening due to atheroma of the right middle cerebral artery. The heart weighed ten ounces; the walls of the left ventricle were thin, and appeared to have slightly expanded under the pressure of the blood (the dilatation was, however, inconsiderable). The muscular tissue, near the apex, was extensively replaced by a yellow fibroid structure, and, on section of the wall of the left ventricle, an angry red mottling was noticeable under the pericardium covering these yellow patches. The microscope revealed the nature of the growth, which consisted of altered blood undergoing vascularisation and fibrosis.

Post-Mortem and Case Book. 1879. No. 137.

3591. Carcinoma of the Walls of the Heart.

59 a. Encephaloid growths, varying in size from a millet seed to a large bean, are situated under the pericardium, for the most part on the left side of the heart. Microscopic examination showed them to consist almost entirely of large granular cells, with several nucleolated nuclei. Many of the cells were caudate.

From the body of a man aged 28, who died in the Hospital with carcinoma of the liver and lungs.

Post-Mortem and Case Book. 1867. No. 302.

3592. Cardiac Aneurism.

24 a. A pouch about the size of a chestnut has been formed in the wall of the left ventricle at its apex. The muscular layer covering it is not much more than one-sixteenth of an inch thick. Within the pouch and upon the adjacent part of the wall are seen the remains of a large clot which was found attached to the septum ventriculorum and the anterior wall of the ventricle. The deeper layers of the clot were of old date and firmly attached to the endocardium, which was greatly thickened around its margin. The heart is somewhat hypertrophied, and weighs nineteen ounces.

From the body of a man aged 59, who was admitted into the Hospital on Nov. 22, 1871, for dropsy dependent on granular kidneys, and died in the following May with peritonitis set up by paracentesis. The cardiac impulse and sounds were very faint during life, but no bruit was heard.

Post-Mortem and Case Book. 1872. No. 120.

3593. Cardiac Aneurism.

27 a. A membranous pouch about the size of a pigeon's egg projects from the left side of the heart. Its cavity opens from the left ventricle by a wide aperture. Its wall is of the thickness of brown paper; no muscular tissue is to be found in it, but the endocardial lining is continuous throughout. In the most prominent part of the pouch is a jagged rent, half an inch in length. The rent has occurred in the course of the left cardiac vein, which runs over the pouch, and which is impervious for a short distance from the point of rupture.

The patient, a crippled tailor, whose age is not stated, had suffered from palpitation since early life, and latterly from feelings of exhaustion, and from fainting fits. Death was sudden, owing to the rupture of the pouch.

Pathological Society's Transactions, vol. xvi, p. 122. *Presented by* Dr. BAGSHAWE.

3594. Rupture of the Right Ventricle.

14 b. There is a rent, an inch long, in the wall of the right ventricle, and a shorter one almost continuous with it. Under the microscope, the striæ of the muscular fibres are well marked, but many oil globules are seen among them. To the touch, the structure feels greasy and rotten. The cavity is much dilated. The whole heart is very large, and weighs twenty-five ounces and a-half. A calcareous deposit, the size of a pea, is seen on one tricuspid valve.

From the body of a man aged 66, who was admitted into the Hospital with dyspnœa of two years' date, and extensive œdema. The physical signs indicated great enlargement of the heart. A rough murmur was present, but could not be localised. A month later, the condition having much improved in the meantime, the patient suddenly fell back, whilst sitting at the table, in the act of swallowing, and died in about three minutes.

Post-Mortem and Case Book. 1866. No. 185. *Lancet,* 1866. Vol. ii, p. 65.

3595. Rupture of the Right Ventricle.

14 a. A transverse rent nearly two inches long, interrupted in two places, is seen in the anterior wall of the right ventricle. The ventricle is not materially dilated, but the muscular tissue is shown by the microscope to be much infiltrated with fat. The walls of the left ventricle are rather thicker than normal.

From the body of a woman aged 47, who was admitted into the Hospital with severe dyspnœa and œdema. A week later acupuncture of the legs was performed. During the operation she was seized with faintness, but complained of no pain. She never rallied, and died three hours later.

Post-Mortem and Case Book. 1866. No. 178. *Lancet,* 1866. Vol. ii, p. 65.

3596. Abscess in the Wall of the Heart.

29 a. In the wall of the left ventricle, just above the anterior mitral valve, is a cavity the size of a pigeon's egg. Its anterior wall has been removed in preparation. Its internal surface is rough. Some septa of semi-transparent membrane are seen in its lower portion. Its upper portion is occupied by a firm coagulum, which protrudes into the ventricle, curls round the adjacent semilunar valve, and extends into the aorta. The remainder of the cavity was, in the fresh state, filled with broken-down blood-clot.

In the outer wall of the same ventricle, just below the semilunar valves, is imbedded a small spherical cyst half an inch in diameter. Its walls are thick; its internal surface smooth and glistening. It contained thin pus. The ventricle is dilated, and its walls hypertrophied.

From the body of a man aged 21, who died in the Hospital after five months of weakness, pain and loss of power in the right arm, and attacks of shivering; eight weeks' palpitation, and three weeks' præcordial pain. A diastolic murmur was heard at base and apex, but not constantly at the former. The pulse indicated aortic regurgitation. Death occurred suddenly, after half an hour's faintness and giddiness. The kidneys were found to be swelled and their tubules blocked. The brain was not examined.

Post-Mortem and Case Book. 1872. No. 149.

3597. Myocarditis.

264. A case of pyæmia. The heart, the spleen, and one kidney, are shown in the preparation. The heart is of normal size. A portion of the posterior wall of the left ventricle, about one square inch in area, is softened by an inflammatory process, and in an almost gangrenous condition. It exuded a little pus, on pressure, in the fresh state. The inflamed portion is included between the divisions of a branch of the left coronary artery, which was found to be blocked by a colourless clot at the point of bifurcation. Over the inflamed area both pericardium and endocardium are ulcerated. The pericardial sac was found ecchymosed and filled with puriform fluid, and some recent vegetations (seen in the preparation) studded the aortic valves.

The lesions found elsewhere in the body were limited to hæmorrhagic blebs on the feet and hands; scattered points of congestion in the lungs; a few colourless infarcts and some congested patches in the kidneys; and an infarct in the spleen, one-half of which was diffluent. No origin for the pyæmic condition could be traced. The bones and joints were healthy.

Microscopical examination of the heart-wall at the junction between the softened and the simply congested parts showed three sets of changes: first, effusions of blood, tearing up the muscular fibre; secondly, accumulations of small cells between the fibres at certain parts; and a more general, but slight, small-cell infiltration; thirdly, destruction of the muscular fibres and conversion of them into granular matter. The last-named condition was recognised only in a small portion of the microscopical sections,

owing to the difficulty of obtaining large specimens from the softened tissue.

The patient was a boy aged 14, of strumous tendency, who died in the Hospital after ten days' illness. He was in the Hospital only during the last day. A systolic murmur was then heard over the whole cardiac area.

Post-Mortem and Case Book. 1878. No. 27. *St. George's Hosp. Reports.* Vol. ix, p. 128.

3598. Endocarditis, Vegetations on the Aortic and Mitral Valves.
45 *a.* The aortic valves are contracted and puckered. Fibrinous vegetations appear on all; and on the anterior mitral. The heart weighed thirteen ounces and a quarter.

From the body of a woman aged 46, who died on Oct. 19, 1868, of embolism of the right middle cerebral artery, several years after a first attack of acute rheumatism, and six weeks after the onset of a second. The heart's action was tumultuous during life, and a loud systolic murmur was heard at both base and apex.

The cerebral lesion is shown in Series VIII (*v. infra*).

Presented by the late Dr. ALLAN MACKAY of Stony Stratford.

3599. Endocarditis, Vegetations on the Anterior Mitral Valve.
198 *a.* The mitral valves are greatly thickened and contracted, and their orifice narrowed. To the upper surface of the anterior adhere irregular masses of recent fibrin, which project between the valves. In the recent state the vegetations admitted of ready separation.

From the body of a woman aged 59, who died in the Hospital of embolism of the brain, spleen, and kidneys. All the valves of the heart were more or less thickened, and the pericardium was rough. A loud blowing double murmur was heard during life over the whole cardiac area. The history is incomplete.

Post-Mortem and Case Book. 1867. No. 251.

3600. Endocarditis, Perforation of the Aortic Valves.
62 *a.* A circular hole is seen in either of the posterior aortic valves. The anterior is extensively ulcerated, and covered with vegetations.

From the body of a woman aged 28, who was admitted into the Hospital at the end of the fifth week of an attack of acute rheumatism, and died at the end of the tenth, of the cardiac affection. A systolic murmur was heard over the whole cardiac area, culminating in the mid-sternal region.

Post-Mortem and Case Book. 1875. No. 9.

3601. Endocarditis, Perforation of the Anterior Mitral Valve.
62 b. The mitral valves are thickened and contracted. A perforation is seen in the anterior, blocked up by fibrinous deposit. The semi-lunar valves are thickened and contracted. The aortic valves show some vegetations. Two of the pulmonary are united by their margins.

From the body of a girl aged 17, who was admitted into the Hospital with symptoms of heart disease of a few weeks' date, and died eight weeks later of cerebral hæmorrhage. A double murmur was heard over the base, and a loud systolic at the apex. There was a history of rheumatic fever a month before admission.

Post-Mortem and Case Book. 1874. No. 203.

3602. Results of Endocarditis, Perforation of the Anterior Tri-
232 b. cuspid Valve.

The anterior tricuspid valve is thickened and puckered in much of its extent, and its tissue is eaten through in places. The edges of the apertures thus formed are cicatrised and smooth.

From the body of a woman aged 33, who was admitted into the Hospital in a moribund condition, and died within twenty-four hours, apparently from the effects of the valve-lesion.

Post-Mortem and Case Book. 1869. No. 295.

3603. Calcareous Deposit in the Aortic Valves.
54 a. The valves are irregularly thickened by large nodules of calcareous matter, and united to form a rigid septum, perforated only by a narrow slit. The heart was much enlarged.

From the body of a man aged 50, who died in the Hospital with severe cardiac symptoms of only two months' date. Before their onset, he said, he had enjoyed good health. The heart-sounds were masked by pericardial effusion. Previous history is wanting.

Post-Mortem and Case Book. 1867. No. 75.

3604. Calcareous Deposit in the Aortic Valves.
54 c. Large calcareous nodules appear in all the aortic valves, which are greatly thickened, contracted, and united by their edges, so as seriously to narrow the orifice. The valves are practically immovable, and unable to close the orifice. The other valves were healthy; the aorta slightly atheromatous.

From the body of a man aged 70, who died in the Hospital after five months' symptoms. A systolic murmur of

a rasping character was heard over the whole cardiac area, culminating in the second left space. The patient had never suffered from rheumatism.

Post-Mortem and Case Book. 1878. No. 136. *St. George's Hosp. Reports.* Vol. ix, p. 183. No. 529.

3605. Calcareous Deposit in the Aortic Valves.

54 *b.* All the aortic valves are irregularly thickened by large calcareous masses, and leave only a narrow slit between them. The other valves are healthy; the aorta shows patches of atheroma. The ventricular walls are greatly hypertrophied.

From the body of a man aged 64, who died two days after admission into the Hospital in a state of delirium. His illness was said to be of six months' date.

Post-Mortem and Case Book. 1875. No. 143.

3606. Chronic Endocarditis, Mitral Stenosis.

52 *b.* The heart weighs seventeen ounces and a-half; the mitral valves are much thickened and contracted, so that the auriculo-ventricular opening is reduced to a button-hole orifice, half an inch long, and a quarter of an inch wide. The right ventricle is much dilated, and its walls are fully three quarters of an inch thick. The walls of the left auricle are much hypertrophied. The other valves are healthy.

From the body of a lad aged 19, who died in the Hospital, after two years' cardiac symptoms. He had never suffered from rheumatism. A loud præsystolic murmur was heard at the apex.

Post-Mortem and Case Book. 1872. No. 7.

3607. Chronic Endocarditis, Mitral Stenosis.

235 *a.* The mitral valves are exceedingly thick and rigid, so that no valvular action could have taken place. The orifice, owing to their contraction, will not allow the passage of the tip of the little finger. The chordæ tendineæ have entirely disappeared, with the exception of one, which is much thickened, and are apparently incorporated with the rest of the valves.

The heart was covered with a thick layer of shaggy lymph, and was much hypertrophied, weighing eighteen ounces and a half. The aortic valves were thickened and contracted.

From the body of a woman aged 31, who died in the Hospital after five months' severe symptoms. She had suffered from rheumatic fever six years before. A loud

double murmur was heard at the apex of the heart, and a systolic bruit (with friction sound) at the base.

Post-Mortem and Case Book. 1866. No. 320.

3608. Chronic Endocarditis, Mitral Stenosis.

52 *a.* The valves are thickened, and united by their edges so that the little finger can barely be passed through their orifices. The chordæ tendineæ are shortened. The walls of the ventricles (especially those of the left) were greatly hypertrophied, and their cavities (especially that of the right) dilated. The tricuspid orifice admitted seven fingers. The left auricle was hypertrophied.

From the body of a man aged 21, who died in the Hospital after five years' cardiac symptoms. There was no history of rheumatism. A loud double murmur was heard at the apex. Death was sudden.

Post-Mortem and Case Book. 1869. No. 313.

3609. Chronic Endocarditis, Thickening of the Mitral Valves, Abscess.

66 *a.* The mitral valves are much thickened, and are fringed with vegetations. At their right extremity an abscess appears to have formed and burst, destroying part of the edge of the anterior valve with the chordæ tendineæ attached, so that the cusp lies loose in the cavity of the ventricle.

From the body of a woman aged 31, who died in the Hospital, of cerebral embolism, about two months after the onset of cardiac symptoms. She was not known to have suffered from rheumatism. A rasping systolic murmur, prolonged into the diastole, was heard at the heart's apex. The brain is shown in Series VIII, and a drawing of the heart in Series XXI (*v. infra.*)

Post-Mortem and Case Book. 1868. No. 87.

3610. Pyæmic Affection of the Aortic Valves.

232 *a.* The valves are much thickened and opaque, being infiltrated with a material resembling semi-purulent lymph. On one of them is a mass of fibrin, the size of a bean, soft, and easily torn off; on another some smaller vegetations.

From the body of a man aged 21, who died in the Hospital, of pyæmia, after excision of the knee.

Post-Mortem and Case Book. 1867. No. 103.

3611. A Healthy Heart, from a case of Acute Rheumatism, in
265. which a well marked Basic Murmur was present.

The heart is displayed so as to show all the valves; which are perfectly healthy. The walls of the ventricles are rather thin at the apex. The muscular tissue, though it was, in the fresh state, paler and softer than natural, proved perfectly healthy under the microscope.

From the body of a woman aged 28, who died in the Hospital, of acute multi-articular rheumatism. The case was of twenty-five days' duration. The patient was admitted on the fourth. The heart's action is described as having then been "irritable", but no bruit was audible. On the following day a soft systolic murmur was heard over the whole cardiac area, culminating in the second left space. It persisted, preserving the same localisation, but becoming louder and rougher, till death. Death was due to gradual decline of strength, a bedsore forming in the later stage. The temperature was not observed to rise above 105°.

Post-Mortem and Case Book. 1880. No. 215.

3612. Stoppage of the Heart in Systole.
257. A transverse section of the heart has been made, showing the left ventricle contracted.

From a case of peritonitis, supervening on enteric fever, in a girl aged 12.

Post-Mortem and Case Book. 1866. No. 29.

3613. Stoppage of the Heart in Systole.
258. A transverse section of the heart has been made, showing the left ventricle contracted.

From a case of hæmorrhage after wound of the brachial artery, in a boy aged 19, fatal in one hour.

Post-Mortem and Case Book. 1866. No. 13.

3614. Stoppage of the Heart in Systole.
259. The apex of the heart has been removed, showing the left ventricle closely contracted.

From a case of cholera in a man aged 58.

Post-Mortem and Case Book. 1866. No. 236.

3615. Rupture of the Chordæ Tendineæ of the Posterior Mitral
68 *a*. Valve.

The cords of the middle of the posterior valve are broken close to their insertion into the fleshy columns. The free edge of the valve is somewhat thickened and opaque. The heart is enormously increased in size by

dilatation of the ventricles. The ventricular walls are of normal thickness, and the muscular fibre is healthy.

From the body of a bricklayer's labourer aged 21, who died, in the Hospital, six months from the presumed date of the rupture. While lifting a heavy load of bricks, he said, he was suddenly attacked with pain under the left nipple, faintness, and dyspnœa. Till then he had been perfectly well. Dyspnœa, with palpitation and frequent cough, persisted and increased in severity from that time. Duskiness of the surface was noticed on admission (two months before death), and dropsy appeared later. Temporary relief was given to the symptoms on several occasions by abstraction of blood; digitalis had no beneficial effect.

In addition to the signs of extensive dilatation of the heart, a thrill was felt in the second left space, from the time of admission, and a loud systolic murmur heard over the whole cardiac area, without special localisation. The pulse was very small and irregular.

Post-Mortem and Case Book. 1869. No. 64. *Path. Soc. Trans.* Vol. xx, p. 150.

3616. Thrombosis of the Heart.

48 *a*. The right side of the heart is completely filled up with clot, the deeper layers of which are firm, the deepest (*i.e.*, those adjacent to the heart-wall) completely decolorised. The firm clots that filled the pulmonary artery in the fresh state had become detached before the specimen was sent to the Museum. Clots of similar character exist in the left auricle and protrude into the ventricle. The opening of the aorta is blocked by clot. The heart is of normal size, and no coarse lesion besides the above is to be detected.

From the body of a woman aged 25, a patient of Dr. George Roper's, who died on March 26, 1878, nineteen days after parturition. Pain in the hepatic region had been present from the third day to the sixth, but otherwise the patient had done well, and she was thought to be convalescent, when, on the eleventh, she was attacked with dyspnœa of the severest character, which continued till death. The features were sharp and pinched, and ecchymoses appeared on the nose and hands; but no œdema occurred. Respirations were at the rate of sixty in the minute. The heart-sounds were normal. Signs of pneumonic consolidation appeared in the last three days.

Post-mortem examination revealed a severe inflammation of the pleura, and of the peritoneum covering the uterus and liver, which had not been suspected during

life. Firm pale clots were found plugging the veins of the uterus and broad ligament; and it appeared probable that the detachment of some portion of these clots had been the cause of the cardiac thrombosis.

Obstetrical Transactions. Vol. xxi, p. 74. *Presented by* Dr. BARNES.

3617. Thrombosis of the Left Auricle, from Mitral Stenosis.

221 *a.* The left auricle is completely filled up, with the exception of a narrow central channel, by firm clot, deposited in irregular laminæ. Some portions of the clot, adjacent to the wall, are very firm. Firm clot is also seen in both auricular appendices. The auriculo-ventricular valves of both sides are thickened and contracted. On the right side they admit the passage of the middle finger; on the left not even the little finger. The ventricles are somewhat dilated. They contain no clot. The aortic valves are beaded.

From the body of a woman aged 37, who died in the Hospital with dyspnœa of the severest character, which had lasted for at least six weeks. Cardiac symptoms had been present since an attack of rheumatic fever (the second) nine years before. A systolic murmur, culminating at the apex, was heard over the heart, both on this and on previous admissions into the Hospital. An infarct was found in the right kidney after death.

Post-Mortem and Case Book. 1877. No. 158. *St. George's Hospital Reports.* Vol. ix, p. 81. *Path. Soc. Trans.* Vol. xxix, p. 52.

3618. Fibrinous Cyst in the Left Ventricle.

220 *a.* The apex of the heart has been cut off and shown in the preparation, so that the cyst may be seen *in situ.* The cyst is about the size of a walnut. Its walls are of the thickness of note-paper. In the recent state, it contained a quantity of soft, semi-fluid material. Examined microscopically, its walls were found to be composed of an irregular fibroid material; its contents of cells, like pus cells in every respect, except that no compound nucleus could be discovered, either with or without acetic acid.

From the body of an elderly gentleman, who was supposed, during life, to be suffering from a vomica in one lung, and a malignant tumour of the liver. Upon examination after death, both pleuræ contained fluid, and the surfaces of both lungs were covered with a thin layer of recent lymph. The lower lobe of either lung, but especially that of the left, was in a state of "pulmonary apo-

plexy". The pericardium was covered with a thin layer of recent lymph. The heart was dilated and large, its walls thin, and all its cavities filled with black clot. There was a deposit of some standing, yellow and broken down internally, in the right auricle. All the valves were thickened by old fibrinous deposit, the tricuspid most, the mitral next, the aortic least. The liver was small and globular, spotted with yellow, smooth on the surface, and not cirrhosed. The kidneys were slightly granular.

Presented by Dr. DICKINSON.

3619. Suppurating Blood-Clot in the Left Ventricle.
32 *a.* The apex of the heart has been cut off and shown in the preparation. In the apex of the left ventricle is a cyst (also cut open) the size of a hazel-nut, with walls of irregular thickness. Its shape is accommodated to that of the ventricular cavity at that point. Its contents were puriform, and showed under the microscope ill-formed pus cells, none of which contained more than one nucleus.

From the body of a woman aged 40, who died in the Hospital with extensive sloughing of the left thigh and knee. In the femoral vein was found a clot, broken down into fluid in its interior, like that in the heart.

Post-Mortem and Case Book. 1868. No. 349.

3620. Rupture of the Popliteal Artery: Traumatic Aneurism.
247 *a.* All the coats of the artery have been ruptured for a length of about two inches; and a traumatic aneurism of the size of a small orange has been formed in the ham. A bougie is passed through the artery, and crosses the aneurismal cavity. The knee-joint is intact.

From the body of a man aged 41, who died in the Hospital, shortly after amputation of the limb for the aneurism shown. The tumour was of nearly five weeks' date at the time of the operation. It had first been noticed a fortnight after a "strain" to the knee, which, in the meantime, had given the patient no particular discomfort. Compression and ligature of the femoral artery were tried, and failed, before amputation was resorted to.

Post-Mortem and Case Book. 1867. No. 193.

3621. Traumatic Aneurism in connection with the Posterior
96 *b.* Tibial Artery. Ligature of the Anterior Tibial in the Back of the Leg.

The preparation shows the popliteal vessels and their branches, dissected. The anterior tibial artery is liga-

tured both in front of, and behind, the fibula. The popliteal artery is ligatured also. A bristle indicates the position of a wound of the posterior tibial artery.

The patient, a boy aged 14, was stabbed in the front of the leg. A pulsating swelling presented on a level with the attachment of the ligamentum patellæ. Mr. Pollock enlarged the wound and tied the anterior tibial artery; then tied the same artery in the ham, and finally placed a ligature on the popliteal. Gangrene supervened, and necessitated amputation three days later. The patient recovered.

Surgical Cases. 1871. No. 945.

3622. 94 *b.* The Carotid Artery of a Horse, three days after Puncture by a Needle.

Presented by Mr. Henry Lee.

3623. 141 *a.* Femoral Artery, ten days after Catgut Ligature.

From the stump of a patient who died in the Hospital of pyæmia, ten days after amputation. The end of the vessel is filled by a firm fibroid plug. No trace of the catgut ligature could be discovered.

Surgical Cases. 1876. No. 1380.

3624. 94 *a.* The Brachial Artery of an Ass, after an Acupressure needle had been placed under it for twenty hours.

Presented by Mr. Henry Lee.

3625. 140 *b.* Femoral Artery, three days after Acupressure.

The calibre of the vessel is not obliterated, but a dark coloured plug, partially adherent to the wall, fills it for an inch above the point of pressure.

1877. No reference.

3626. 228 *a.* Thrombosis of a Branch of the Pulmonary Artery.

A firm plug is seen blocking a branch of the pulmonary artery, nearly as large as a quill.

From the body of a gentleman who fell while skating, complained of faintness, and died two minutes later. He had previously enjoyed good health. Many of the pulmonary branches were similarly occluded. The heart was found contracted. A perforation existed in one aortic valve. The basi-cerebral arteries were atheromatous, and the liver contained a hydatid cyst.

Post-Mortem and Case Book. 1867. No. 7.

3627. Atheroma of the Aorta in a Child three years old.

151 *a*. The lining membrane of the vessel has lost its smoothness, and is dull looking, and rough to the touch. It is marked throughout with a number of fine, closely set, transverse lines.

From a child aged 3, who died, in the Hospital, of spinal meningitis. Atheromatous deposit was found in the mitral valves as well.

There was a history of syphilis on the part of the father. The kidneys showed the appearances of tubal nephritis, possibly due to scarlatina five months before.

Post-Mortem and Case Book. 1869. No. 55.

3628. Extensive Atheroma of the Aorta.

151 *b*. The portion of aortic wall shown is diseased in its whole extent; and the inner coat is largely separated from the middle. Irregular nodules appear on the outer surface.

From the body of a lady aged 94, who died in 1870. The ventricles of the heart were uncontracted, and full of decolorized clot, which extended into the large vessels. In the aorta there was much of this clot adherent to the ragged wall.

Presented by Dr. DICKINSON.

3629. Atheroma of the Aorta, Dissection of the Inner Coat.

202 *b*. Atheromatous patches of considerable size appear in the wall of the vessel. In several places a band of the inner coat is raised from the subjacent tissue, remaining attached at both ends, and forming a kind of bridge.

From the same case as No. 3646.

3630. Peculiar Deposit on the Walls of the Abdominal Aorta.

157 *a*. On the lining membrane are seen several nodules, about the size of peas, of a dark red colour, which are shown by the microscope to be altered blood. Large patches of atheroma are seen besides.

From the body of a woman aged 50, who died in the Hospital of gangrene of the right foot. The right popliteal artery was found occluded by a nodule similar to those seen in the aorta, and firmly plugged by fibrin behind it. See Nos. 3632 and 3633. The cæcum was carcinomatous.

Post-Mortem and Case Book. 1867. No. 274.

3631. Embolism of the Popliteal Artery.

157 *b*. The popliteal artery from the same case as No. 3630. It is

occluded for several inches by a firm plug, so adherent to the lining membrane that the coats have been torn asunder in the endeavour to separate it. The plug consists, for the most part, of fibrin, but in the recent state it was seen to be tipped at its distal extremity by a body similar to those found in the aorta.

3632. Dry Gangrene of the Foot, from Embolism of the Popli-
xvi, 109 teal Artery.

From the same case as Nos. 3630 and 3631.

A line of demarcation extends from the level of the tarso-metatarsal joints to the point of the heel on either side.

3633. Extensive Calcareous Deposit in the Walls of the Aorta.
84 a. A ring of large calcareous masses is seen just above the valves, occluding the orifices of the coronary arteries.

From the body of an out-patient of Dr. Dickinson's, who died suddenly on April 19, 1870. He had been for two days under treatment for rheumatic pains in the limbs.

3634. Atheroma of the Pulmonary Artery, Occlusion of its
200 a. Right Division.

The pulmonary artery is much dilated. Its walls are greatly thickened, and roughened by atheromatous nodules. The right division is completely occluded at its origin for nearly an inch by a firm fibroid plug. Beyond the plug the vessel is quite healthy. The occluded portion is surrounded by fibroid material exactly resembling that of the plug. The right ventricle of the heart is dilated and hypertrophied; the walls of the left are thinner than normal. The valves are healthy, except that the tricuspids are slightly thickened; but the auriculo-ventricular orifices are dilated.

The right lung showed no striking changes. The pleural cavity was distended with serous effusion, and crossed by a few bands of adhesion, and the compressed pulmonary tissue was tough and œdematous.

From the body of a woman aged 38, who died in the Hospital with dyspnœa, cough, palpitation, and pain about the right clavicle and the right side of the neck, of fifteen months' duration. A harsh systolic murmur was heard over the whole cardiac area, most plainly along the margins of the sternum; and at the inferior angle of the left scapula.

Post-Mortem and Case Book. 1879. No. 115.

3635. Thickening of the Walls of an Artery.
145 *a*. The walls are thickened to such an extent as almost to obliterate the calibre. For the sake of comparison, a portion of a similar artery in its natural state is placed in the jar.

Presented by Mr. GEORGE HARRISON.

3636. Communication between the Aorta and the Pulmonary
266. Artery, probably from Atheroma.

The preparation shows the aortic arch and a portion of the wall of the pulmonary artery. The latter is adherent to the descending portion of the arch, over an area the size of a sixpence, which is pierced by an irregular aperture about large enough to admit a quill-pen. The aperture is probably due to atheroma, as the whole of the aorta is affected with that disease.

The heart weighed fourteen ounces; the right ventricle was dilated, and the edges of the auriculo-ventricular valves slightly thickened. The right pleural cavity was distended with serum; nothing else remarkable was found.

From the body of a woman aged 50, who died after five months' palpitation, dyspnœa, cough, and dropsy. The onset of the symptoms was sudden and severe. No cyanosis was observed. The pulse was throughout very rapid, 130 and upwards; the urine scanty and albuminous.

Over the bases of the lungs, especially that of the left, resonance was deficient; harsh blowing respiration and *râles* were heard. The area of cardiac dulness was extended upwards and to the left; the apex-beat, strong and irregular, was felt and seen three or four inches below, and two inches to the left of, the nipple. The heart sounds were confused. No distinct murmur was heard. Death was by syncope.

Presented by Dr. G. P. GOLDSMITH, of Bedford.

3637. Spontaneous Laceration of the Thoracic Aorta.
215 *a*. From the body of a labourer, said to be 50, but probably upwards of 60, years of age, brought dead into the Hospital.

The aorta is somewhat wider than usual, but of even calibre. Its walls are thinner and more readily lacerable than normal. Here and there they are spotted with soft atheroma. About an inch below the origin of the left subclavian artery, the inner and middle coats are divided by a clean transverse rent through the whole of their circumference, except that segment which abuts on the vertebræ. The outer coat is dissected off about the rent,

and a cavity formed between it and the middle coat. By a jagged rupture this cavity communicates with that of the left pleura, into which free hæmorrhage had taken place, as well as into the mediastinum. The heart was natural.

Post-Mortem and Case Book. 1879. No. 255.

3638. 202 *a.* Dissecting Aneurism of the First Portion of the Arch of the Aorta.

It is of the size of a turkey's egg, or rather larger. It has commenced in the anterior wall of the aorta, immediately above the valves, by rupture of the inner and middle coats. The outer coat has then been dissected off for about half an inch upwards, so as to denude half the circumference of the vessel. The aneurism has been opened from the front in preparation. Its cavity appears as the direct continuation of the ventricle. Just above the posterior valves, an opening the size of a shilling gives access to the tube of the aorta; and above the opening the tube projects into the aneurismal cavity, its lower edge forming an arch across it. The wall of the aneurism is rough internally, and in many places calcareous plates appear.

From the body of a man aged 39, who died in the Hospital. He had been treated for symptoms of a dyspeptic character, of seven or eight weeks' date. A loud systolic murmur, not admitting of localisation, was heard over the whole chest.

Post-Mortem and Case Book. 1871. No. 41. *Path. Soc. Trans.* Vol. xxii, page 113.

3639. 98 *b.* Fusiform Aneurism of the Arch of the Aorta: Rupture into the Trachea.

The aneurism is formed by dilatation of the greater part of the arch, bearing most upon its posterior wall. Portions of the trachea and bronchi are included in the preparation. They are seriously compressed by the aneurism. An inch above the bifurcation, a triangular rent, as large as a threepenny-piece, in the anterior wall of the trachea, places the aneurismal cavity in communication with that tube.

From the body of a gentleman aged about 40, who consulted Dr. Dickinson. He had long suffered from dyspnœa, and had recently spat blood in small quantities. There was no external pulsation, and the auscultatory signs were uncertain in character. Aneurism was, however, diagnosed. The patient, dissatisfied, applied to a homœo-

path, who assured him that his ailment was trivial, and recommended exercise. Under this treatment hæmorrhage became more profuse and soon ended in death.

Presented by Dr. DICKINSON.

3640. Aneurismal Dilatation of the Arch of the Aorta.
97 *a.* The specimen, from the body of a man aged 37, who died in the Hospital, is chiefly interesting on account of the firm adhesion of the apex of the left lung in front of the sac. The presence, close to the surface, of a large aneurism was to a great extent masked by the intervention of the flattened lung. Laryngotomy, as seen in the preparation, was performed for laryngeal spasm.

Post-Mortem and Case Book. 1878. No. 9.

3641. Aneurismal Dilatation of the Aorta: Rupture into the
98 *c.* Trachea.

The ascending and transverse portions of the arch are shown in the preparation. They are greatly dilated, and patches of atheroma are seen on their inner aspect. At the junction of the ascending and transverse portions, the posterior wall has given way over a small area, and a diffuse aneurism, the size of a hazel nut, has been formed behind it. The diffuse aneurism projects into the trachea, and communicates with it by a jagged rent.

A glass rod has been passed through the diffuse aneurism from the aorta to the trachea.

From a case in the practice of Mr. F. N. Jessett, of Erith, Kent, who says: "The patient was a young man of 28 years. He had never been laid up, or experienced any inconvenience, until a week before his death, when he had a slight cough, for which he applied once at the surgery for some cough mixture, but did not leave his work. It was during an attack of coughing that the aneurism burst; and he died in ten minutes."

Presented by Mr. F. N. JESSETT.

3642. Intracardiac Aneurism: Rupture into the Right Auricle.
83 *b.* A wide opening between the posterior aortic valves gives access to an aneurism the size of a turkey's egg. The aneurism has intruded itself between the neck of the left ventricle and the right auricle, and presents between the aorta and the auricular appendix. A secondary sac, of the size of a chestnut, protrudes into the right auricle, and exhibits a small rent. All the cavities of the heart, especially the left ventricle, are much dilated.

From the body of a labourer aged 36, who died in

the Hospital. He had suffered from dyspnœa, palpitation, and cardiac pain, for five years, dating from a first attack of "rheumatism"; from severe dyspnœa and palpitation for about fifteen months, from interscapular and epigastric pain for about four. He died of dyspnœa and exhaustion. Seven months before death, a loud systolic murmur was heard over the whole cardiac area, culminating at the sixth left rib in the parasternal line. It was audible over the whole of the front, and the left flank, and faintly over the back, of the chest also. Six weeks later, in the right flank as well. For six weeks before death it was heard also in the hypochondria and along the course of the abdominal aorta. It then culminated at the ensiform cartilage, and was accompanied by a diastolic murmur at the base.

Post-Mortem and Case Book. 1878. No. 181. *Path. Soc. Trans.* Vol. xxxi, p. 95.

3643. Intracardiac Aneurism arising from a Sinus of Valsalva.

83 *d.* From the sinus of the right posterior aortic valve, a round aperture, the size of a shilling, opens into an aneurismal cavity situated between the root of the aorta and the right auricle. The aneurism passes forwards between the auricle and the roots of the large arteries, bulging into the former. It protrudes in the form of a rounded prominence between and below the two posterior aortic valves. Its walls in this part are thin, and rent in two places, so that it has opened into the cavity of the left ventricle. The ventricles are both dilated.

From the body of an asylum-attendant aged 39, who died in the Hospital. He had suffered from palpitation, on exertion or excitement, for eighteen years, dating from an attack of jungle fever, and from cough and slight dyspnœa for eighteen months. Ten weeks before death, a three-mile chase after a lunatic left him thoroughly "blown", and he "felt something go at his heart". From the morrow, severe dyspnœa and dropsy below the waist were present, and the latter increased till death.

The heart's apex-beat was diffused. A double murmur was heard, though nowhere loud, over the whole of the front of the chest. It was clearest along the sternal margins, especially the right, and culminated at the fourth right costo-sternal joint. A strongly marked "water-hammer" pulse was felt in all the superficial arteries.

Post-mortem and Case Book. 1878. No. 138.

3644. Aneurism in the Septum Ventriculorum (Aneurism of the
83 a. Right Ventricle).

The pericardium is coated with a layer of lymph. The cavity of the right ventricle is much dilated; its endocardium is thickened and of pearly whiteness. Some of the smaller columns are almost entirely fibroid, having only a little muscular tissue in their centres. Just below the semi-lunar valves a pouch or aneurismal dilatation, about the size of a pigeon's egg, opens from the ventricle by an aperture the size of a sixpence, partially occluded by a band of fibroid material that stretches across it. In the septum between the ventricles there is a small sac (which has been laid open) which communicates with the aorta by a small opening at the bottom of one of the sinuses of Valsalva (the right posterior). The sac appears to have been formed by separation of the two layers of the septum throughout its whole extent. A nipple-shaped process of the sac, tipped by an ulcerated opening, projects into the right auricle.

From the body of a man who died in the Hospital, somewhat suddenly, after having suffered from cough, thoracic pain, and loss of flesh, for about two years. A rough systolic bruit was heard below the sternum. A loud murmur, also systolic, in the upper part of the left chest, culminated in the second space. The pulse possessed the "water-hammer" character.

Post-Mortem and Case Book. 1868. No. 19. *Path. Soc. Trans.* Vol. xix, p. 156.

3645. Intrapericardial Aneurism of the Aorta: Rupture into the
83 c. Left Auricle.

The left ventricle is somewhat dilated and hypertrophied; in other respects the heart is normal. The aorta is extensively affected with soft atheroma, and much dilated at its origin. Immediately above the left posterior aortic valve opens a wide-mouthed aneurism which encroaches upon both auricles. It has ruptured into the left by a minute aperture. When the heart was removed, no tumour was perceptible externally, but the base appeared unduly broad, and the auricular appendices were more widely distant than usual. The even expansion of the aneurism in all directions sufficiently explains the fact of its not having become more superficial, as well as its unusual termination by perforation of the wall of the left auricle. The trachea and bronchi are shown in the preparation; the latter appear to have been compressed by the aneurism.

From the body of a carman aged 44, who died in the Hospital with dyspnœa so severe that no history could be obtained. He suffered also from cough and pain in the chest. The heart's apex-beat was not felt. A systolic murmur was heard over the whole cardiac area, culminating at the base. The legs were œdematous.

Post-Mortem and Case Book. 1879. No. 62. *Path. Soc. Trans.* Vol. xxxi, p. 96.

3646. 81 *a.* Aneurism of the Ascending Aorta: Leakage into the Pericardium without Visible Rupture.

The arch of the aorta is affected by atheroma, and irregularly dilated at its origin. About two and a-half inches from the valves a round aperture, about one-sixth of an inch in diameter, in the anterior wall, gives access to a spherical aneurism, the size of an infant's head.

In the recent state, the aneurism occupied the upper part of the front of the thorax, and extended a little way into the neck. The veins of the thorax were compressed, and the superior vena cava so flattened, as to be hardly pervious.

Below the aneurism appeared, on opening the body, a second larger tumour. This was the pericardium, distended with dark fluid blood. As no perforation or rupture whatever was to be found in the wall of the aneurism, or in the adjoining pericardium, it was not obvious by what means leakage took place.

From the body of a painter aged 33, who died in the Hospital with symptoms of granular degeneration of the kidneys of six months' date. Those referable to the aneurism, cough, dyspnœa, and palpitation, were of barely three months' date. He was in the Hospital for nine days. The face was puffy and the neck turgid, but dropsy had disappeared from the legs. A systolic murmur was heard, culminating at the base, and a faint diastolic murmur that appeared to culminate at the apex. Death was preceded by severe dyspnœa for some twelve hours.

Post-Mortem and Case Book. 1879. No. 291. *Path. Soc. Trans.* Vol. xxxi, p. 82.

3647. 98 *a.* Aneurism of the Ascending Aorta. Rupture into the Trachea.

A thick-walled aneurism, the size of a small orange, arises from the right and posterior aspect of the ascending aorta, just including the origin of the innominate artery. Where the trachea and aneurism are in contact, the wall of the latter is thinned, that of the former ulcerated, two

of the cartilaginous rings are eaten through, and a small rupture of the wall has taken place.

From the body of a man aged 46, brought dead into the Hospital. He had fallen in the street, bleeding from the nose and mouth.

Post-Mortem and Case Book. 1869. No. 303.

3648. 103 *a.* Fusiform Aneurism of the descending portion of the Aortic Arch: Rupture into the left Pleural Cavity.

The arch of the aorta, from the origin of the left subclavian artery to the commencement of the thoracic portion, is dilated into a fusiform aneurism, sacculated on the surface. The wall of the aneurism is extensively affected with atheroma, and in some places ulcerated on the inner surface. The most prominent saccule, on the outer aspect of the aneurism, is ruptured.

Mr. Venning, who presented the preparation, gave the following history. That he was called one night to Quarter-Master H. H., of the 1st Life Guards, and found him in a sitting posture, in an arm-chair, quite dead. His wife had left him two hours previously in the same chair apparently well. He had been suffering from gout, but the attack had subsided.

Forty-six hours after death, the body was found to be in good condition. The left pleural cavity contained an enormous blood-clot and a large quantity of serum, upon which the lung floated. On removing the coagulum the aneurism was discovered. It extended from the point at which the left subclavian artery is given off, to that at which the aorta becomes thoracic, *i.e.*, just below the fifth dorsal vertebra. Its outer wall was firmly attached to the root of the left lung, and in its left wall was an ulcerated opening of about the size of a threepenny-piece, which communicated with the left pleural cavity. The remainder of the aorta was in a very atheromatous condition. The heart itself was fatty.

Presented by Mr. EDGCOMBE VENNING, *Assistant-Surgeon, 1st Life Guards.*

3649. 102 *a.* Fusiform Aneurism of the Descending Aorta: Rupture into the left Bronchus.

The arch of the aorta is atheromatous and somewhat dilated throughout. Its descending portion and the commencement of the thoracic aorta are markedly so, constituting a fusiform aneurism. Where the aneurism lies against the left bronchus, its wall is thinned and rup-

tured. Both the adjoining and the opposite wall of the bronchus are ulcerated over the corresponding area. The former is ruptured, and an opening large enough to admit the fore finger, partially plugged by a block of fibrine, places the aneurism in direct communication with the bronchus close to the bifurcation of the trachea. The edges of the opening are smooth and rounded.

From the body of a pipe-layer aged 41, who died in the Hospital two days after admission.

The symptoms, of uncertain date, were limited to a feeling of tightness and weight in the chest, and a short irritable cough; so slight were they, indeed, that the case had nearly escaped serious attention.

The breath sounds, on admission, were absent over the whole of the left lung, though resonance was good at the apex. The pulse was very weak, but the heart-sounds natural.

Death was, of course, by hæmorrhage, and fresh blood was found in both lungs after death. That it had accumulated gradually was suggested by the result of the last physical examination, three hours before death, when the whole of the left lung was dull on percussion. A fawn-coloured material, consisting of altered blood, which was found filling the air passages of the left lower lobe, indicated a remote date for its commencement. The termination of the case was, however, sudden, with a gush of blood from the nose and mouth.

Post-Mortem and Case Book. 1866. No. 309. *Path. Soc. Trans.* Vol. xviii, p. 47.

3650. 103 *b*. Aneurism of the Thoracic and the upper part of the Abdominal Aorta: Rupture into the left Pleural Cavity.

The aorta generally is much thickened by soft and calcareous atheroma, and, opposite the last three dorsal, and the first lumbar, vertebræ, is dilated into a large aneurism which embraces the bodies of those vertebræ and that of the ninth dorsal. It has burst into the lower part of the left pleural cavity, by an aperture the size of a shilling, in close proximity to the vertebral column. The part of the aneurism immediately below the diaphragmatic opening is again dilated into a round pouch the size of an orange, from which the cæliac axis is given off. The vertebræ mentioned are somewhat eroded.

From the body of a man aged 35, who died in the Hospital. He had suffered from lumbar pain for ten, from epigastric pain and pulsation for five, months. The pulsation of the aneurism was felt during life, but no bruit was heard.

Post-Mortem and Case Book. 1872. No. 28.

3651. Aneurisms of the Descending Aorta: Erosion of Vertebræ.
105 a.

The preparation shows the dorsal vertebræ from the second to the twelfth, with portions of the ribs attached; and the first lumbar vertebra.

The bodies of the dorsal vertebræ, from the third to the eleventh, are eroded deeply, many being almost entirely destroyed, while the intervertebral cartilages are almost intact. The eighth, ninth, and tenth ribs of both sides, and the seventh right rib, are also eroded. The natural lateral curve of the spine is exaggerated.

Two aneurisms were concerned in the process. The one, formed by dilatation of the descending portion of the arch, was of the size of a Tangerine orange, and lay against the left side of the third and fourth dorsal vertebræ.

An inch of normal calibre intervened between this aneurism and the other, which was formed from the thoracic aorta. It had become diffuse, and had attained the size of a coco-nut. It lay against the right side of the fourth, against both sides of the fifth——tenth dorsal vertebræ, and against the front of the upper third of the eleventh.

Death had ensued on rupture of the latter aneurism into the left pleural cavity.

From the body of a sailor aged 36, who died in the Hospital. The symptoms were of rather more than two years' date. Pain was prominent from the first, and was localised in the hypochondria, the epigastrium, and, later, in the shoulders. About a month before the termination of the case, severe pain attacked the patient suddenly in the left lumbar region. It extended to all parts of the abdomen, was excruciating in the hepatic region, and continued till the fatal rupture.

Post-Mortem and Case Book. 1880. No. 151.

3652. Aneurism of the Aortic Arch: Rupture into the Œsophagus.
194 a.

The specimen is a large blood clot, weighing two pounds and a half, formed in the stomach and possessing its shape. It resulted from the bursting of an aneurism of the aortic arch into the œsophagus. In the fresh state it was soft, of homogeneous black-red colour, and absolutely smooth in outline; it was perfectly moulded to the cavity of the stomach and, for a short distance, to that of the œsophagus and duodenum also.

Post-Mortem and Case Book. 1878. No. 349.

3653. Ligature of Cervical Arteries for Aneurism of the Aortic
102 c. Arch: Galvano-puncture.

Ligature of the right carotid and of the third portion of the right subclavian was performed by Mr. Holmes on November 16, 1871, in a man aged 50, for an aneurism presenting in the upper part of the right chest. The aneurism had been perceptible for seven months, and the patient had suffered from pains about the shoulders and chest for four months before. The effect produced on the aneurism was but temporary, and towards the end of December it began to increase in size. On January 4th, 1872, Dr. Althaus, in conjunction with Mr. Holmes, performed galvano-puncture. Four needles were inserted, and the constant current passed for thirty minutes. The minute spurt of blood that followed the withdrawal of three of the needles was easily stopped by pressure. The sac inflamed. On January 7, Mr. Holmes incised it. Gas only was voided. The patient sank, and died on January 9.

The aneurism, of the size of a large orange, is formed by dilatation of the anterior wall of the ascending and transverse aorta, and of the commencement of the innominate artery. Its walls are atheromatous, and in places calcareous. Its anterior wall consists simply of the thoracic integuments. It has perforated the sternum in its upper and middle portions, and also the first three costal cartilages, and the rough ends of the corresponding ribs lie in the aneurism.

The sac was filled, in the fresh state, with degenerated, reddish brown, non-laminated coagulum, the remains of which are seen in the preparation.

The ligatures had disappeared before death. The carotid, at the point of ligature, was encircled and narrowed by a dense fibrous band, the subclavian was occluded by a diaphragm of opaque white tissue. The left inferior thyroid artery is seen to arise from the aortic arch, in close proximity to the carotid of that side.

The aneurism gave rise to no murmur during life.

A rod, in the preparation, is passed through a small aperture that connects the tracheal with the œsophageal tube. Imbedded in this aperture was found a sharp fragment of bone, probably swallowed in the food.

Post-Mortem and Case Book. 1872. No. 12.

3654. Operation for Aneurism of the Aortic Arch: Accidental
173 a. Ligature of the Left Internal Jugular Vein.

The preparation shows the left side of the neck, and the aneurism, dissected. The aneurism is as large as an infant's head; it involves the greater portion of the aortic arch, and rises in the neck as high as the cricoid cartilage. Ligatures are seen on the internal carotid artery, and on the internal cephalic division of the internal jugular vein, in either case just above the bifurcation of the vessel.

From the body of a woman aged 47, who died in the Hospital.

The symptoms referable to the aneurism were of twelve months' date at the time of the operation, and the tumour had been noticed for nearly as long. The operation was performed on January 19, 1878. The large vertical vessel first exposed by the incision appeared to pulsate, and was ligatured. The temporal pulse remained unaffected. A second pulsating vessel, exposed behind the other, was then ligatured also. At the moment of tightening the ligature the temporal pulse ceased, but in a few seconds it returned with its former strength. For the first twelve hours after the operation the patient seemed to do well. She then became comatose and (right) hemiplegic; and died, on the second day from the operation.

After death, the convolutions of the left hemisphere of the brain were found to be flattened, while on the right side the sulci were well marked. The cerebral substance was softer on the left side than on the right, especially in the centre of the hemisphere. The septum was softer than natural.

Post-Mortem and Case Book. 1878. No. 23.

3655. 108 *a*. Aneurism of the Abdominal Aorta: Rupture into the Colon.

The abdominal aorta is much affected with atheroma. A round aperture, the size of a shilling, in the anterior wall, gives access to an aneurism as large as an orange, which lies in front of the artery. The aneurism has been opened in preparation, and is seen to contain firm laminated coagulum. From it, on the left side, the renal artery arises. To it, on the right side and in front, the colon is adherent. The adjacent walls of aneurism and gut are thinned, where in contact, and in one place ruptured.

The left kidney is small, and granular on the surface. The ureter is in close relation with the aneurism.

From the body of a man aged 76, a patient of Dr. Dickinson's. The symptoms had commenced fourteen months before death, with a sudden attack of pain and swelling in the left testicle. They subsided, but dull pain

persisted in the situation of the aneurism, with obstinate constipation, nausea, vomiting, and weakness. The pain increased, with agonizing paroxysms. Tenderness was elicited by deep pressure at a spot an inch to the left of the navel. From the eighth month, under treatment by morphia and strychnia, the pain and nausea subsided, and the general health improved. About two months before death, pulsation began to make the presence of an aneurism manifest. Considerable hæmorrhage into the bowel took place nine days before the final rupture of the sac, which was attended by sudden death.

Pathological Society's Transactions. Vol. xxvi, p. 76.

3656. 78 *a.* Three True and Circumscribed Aneurisms of the Coronary Arteries.

The heart is shown. Three small aneurisms are seen on branches of the coronary arteries. One is on the left border of the heart, about an inch from the base. Its walls are tolerably thick, and it is full of laminated clot. It is connected with a branch descending from the left coronary artery (passing down the anterior inter-ventricular sulcus), which is atheromatous at its upper part, but not obstructed. In the mid-line of the front of the heart, near the root of the pulmonary artery, is a second, solid to the finger, and entirely occupied by firm, consolidated fibrin. It is connected with a branch of the right coronary artery. This branch, throughout its entire length, is totally occluded by a fibrinous coagulum, and so shrunk as to be hardly distinguishable from neighbouring parts. To the left of the others (towards the right edge of the heart), and on a higher level than the first, is a third aneurism. It is almost empty. Its walls are thin. At one point the wall is perforated by a hole that scarcely admits the passage of a bristle. It communicates with a descending branch of the right coronary artery, which is unobstructed and in all respects healthy. Through this minute rupture fatal hæmorrhage took place, and the pericardium was found after death filled with fresh blood-clot. The aortic valves are thickened, and the left ventricle hypertrophied.

From the body of a smith aged 26, who died in the Hospital.

In addition to the hæmorrhage described above, numerous embolic extravasations were found in the body after death, and to them the symptoms with which he was admitted were referable. A rough systolic murmur was heard over the heart's apex, and some observers

believed that an exocardial murmur was present also. Death was somewhat sudden, about twenty-four hours after admission.

Post-Mortem and Case Book. 1867. No. 5. *St. George's Hosp. Reports.* Vol. ii, p. 285.

3657. 102 *b.* Aneurism of the Innominate Artery: Rupture into the Trachea.

The aneurism is about the size of an orange, and is formed by a dilatation of all the coats of the innominate artery, throughout its whole length. Posteriorly, the wall of the aneurism is deficient, and the sac is completed by the anterior wall of the trachea, several rings of which are exposed and eroded. An ulcerated opening, the size of a threepenny piece, in this situation, places the cavity of the aneurism in communication with the tracheal tube. The sac contains a few shreds of fibrin adherent to its inner surface. In the recent state it was full of dark soft blood-clot. The aorta is very atheromatous. The left subclavian and carotid arteries are healthy.

From the body of a painter, an old soldier, aged 32, who died in the Hospital. He had suffered from pains in the back and limbs, and from attacks of dyspnœa, for two years. A loud rough double murmur was heard at the heart's base, and over the great vessels of the neck. A softer systolic bruit at the heart's apex and in the left flank. No tumour or pulsation was felt. Death was sudden, from hæmorrhage.

Post-Mortem and Case Book. 1867. No. 217.

3658. 112 *a.* Aneurism of the External Carotid Artery. (Aneurism of the Transverse Aorta.)

A sacculated aneurism, about the size of a hen's egg, arises from the left external carotid artery, a short way from its origin. It is nearly spherical in shape. Its walls are tolerably thick, tough, and intimately connected with the adjoining fasciæ. In front, the submaxillary gland is adherent to it; a fact which led, during life, to an exaggerated estimate of its size. The cavity contains a few layers of laminated fibrin.

The common carotid artery appears healthy. The innominate and the aorta show patches of atheroma. A wide mouthed aneurism, the size of a chestnut, opens from the posterior wall of the latter, just behind the origin of the left cervical vessels. By a minute rent it has opened into the trachea.

From the body of a labourer aged 53 (an old soldier) who died in the Hospital by the rupture of the aortic aneurism, which had not previously been suspected. The carotid tumour, which gave rise to no symptoms, had been noticed for twelve months, and he had been admitted with a view to operation.

Post-Mortem and Case Book. 1879. No. 309.

3659. Aneurism of the Arteria Transversalis Colli.
113 *a.* Connected with the arteria transversalis colli of the left side is a sacculated aneurism, the size of a small walnut, filled with firm gelatinous fibrin. The artery is quite pervious, and is given off from the subclavian directly, not, as usual, from the thyroid axis.

From the body of a man aged 45, who died in the Hospital, of phthisis. The aneurism had been observed for twenty-three or twenty-four weeks before death, and he had been discharged from the army in consequence. Treatment by pressure, and by local applications of iodine, was adopted in the Hospital.

Post-Mortem and Case Book. 1868. No. 357.

3660. Aneurism of the Hepatic Artery: Rupture into the Peri-
132 *a.* toneal Cavity.

The aneurism is of about the size of a turkey's egg. It has made its way between the layers of the peritoneum, and become adherent to a coil of small intestine, which is shown in the preparation. A window has been cut in the sac, to show its communication with the artery. Just above and to the left is seen a large jagged rupture, opening into the peritoneal cavity. The cœliac axis is absent, and the vessels usually given off from that trunk arise from the aorta. The aorta was atheromatous.

The parts were taken from the body of a man aged 35, brought dead into the Hospital.

Post-Mortem and Case Book. 1871. No. 121.

3661. Aneurism of the Superior Mesenteric Artery: Rupture
115 *a.* into the Peritoneal Cavity.

The aneurism is fusiform, and six inches in length. It commences with the artery itself, the aortic opening of which is greatly dilated. The branches of the superior mesenteric are given off from the end of the sac. The sac is nearly filled with laminated and decolorised clot. A narrow channel is left near its upper wall, a wider one in its axis. The branches of the superior mesenteric artery arise from the lower end of the sac. The

aorta, and the neighbouring branches of the aorta, are atheromatous. An irregular rupture has taken place in the wall of the aneurism, just at its mouth, on the right side. The rupture involves the wall of the aorta as well.

From the body of a painter aged 40, who died in the Hospital. He was first admitted on November 22, 1871. The aneurism then presented in the umbilical region, just to the left of the median line. It was stated to be of six weeks' duration, and to have appeared suddenly, with much pain, while the patient was straining at stool. Treatment by compression of the aorta was kept up, under Mr. Pollock's direction, till May 1872, and the tumour became more solid. In May the patient left the Hospital. He returned on November 20. The tumour had become much larger. Treatment by complete rest was pursued until the rupture of the sac put an end to life on December 20.

Post-Mortem and Case Book. 1872. No. 304.

3662. Fusiform Aneurism of the Right Femoral Artery: Operation.
117 a.

The aneurism is of about the size of a walnut. Fibrinous laminæ line its interior; the centre is occupied by recent coagulum. About an inch above, the artery is tightly constricted by a single silver ligature, which has not cut through its coats. Between the aneurism and the ligature, and for about two inches above the latter, firm clot fills the vessel. Below the aneurism it contains very little clot. Two branches given off between the ligature and the aneurism are seen to be pervious. The whole artery is extensively atheromatous.

From the body of a man aged 51, who died in the Hospital in consequence of the operation. The aneurism had presented in the groin for six months. It had first appeared within twenty-four hours after a strain. Ligature of the external iliac artery was performed by Mr. Pollock on September 14, 1865, and the patient died three days later, in consequence of diffuse inflammation of the areolar planes, and bronchitis.

Post-Mortem and Case Book. 1865. No. 255.

3663. Aneurism of the Femoral Artery: Diffusion: Ligature.
117 c.

The aneurism opens from the artery just above the popliteal region, by an aperture as large as a shilling. It is of the size of a coco-nut. Its walls are formed for the most part by consolidation of the surrounding tissues.

It is partly filled with firm fibrinous laminæ, but mostly with recent clot.

The whole artery is affected with atheroma. A thoracic aneurism existed in the same patient.

From the body of a plumber aged 46, who died in the Hospital. The aneurism appeared to be of at least eight months' date, but had become diffused, in consequence of a false step in descending a ladder, sixty days before death. Ligature of the femoral artery was performed by Mr. Brodhurst on March 21, 1867. Secondary hæmorrhage necessitated repetition of the ligature ten days later. Bleeding again returned, and the patient died on April 3.

Post-Mortem and Case Book. 1867. No. 82. *Path. Soc. Trans.* Vol. xviii, p. 64.

3664. The Femoral Artery from the same case as No. 3663.
117 *b.* There are seen in succession from below upwards, (1) the original silver ligature, which has nearly cut its way through the artery. (2) The two silver ligatures applied on March 31, which firmly encircle the vessel, and (3) a silk ligature applied higher still, shortly before death, which also remains *in situ.* Below the original ligature, a vessel contains very little clot, and it is clear that the second recurrence of hæmorrhage was from the lower end of the artery.

3665. Popliteal Aneurism: Ligature: Cure.
127 *a.* A wide-mouthed aneurism, the size of a walnut, springs from the popliteal artery, just above its bifurcation. The cavity of the aneurism is filled with dark-coloured, laminated clot. Eight inches above, the femoral artery is constricted by a catgut ligature, which is embedded in lymph.

From the body of a man aged 34, who died in the Hospital, of delirium tremens. Ligature of the femoral artery was performed by Mr. Holmes on August 12, 1875, for the aneurism, which had then been noticed for about eleven weeks, and had probably existed about seventeen. The patient progressed well till August 17, when a visitor surreptitiously brought him a quantity of spirits. Delirium set in next day, and ended fatally on August 19.

Surgical Cases. 1875. No. 976. *St. George's Hospital Reports.* Vol. viii, p. 474. *Clinical Society's Trans.* Vol. ix, p. 19.

3666. Diffuse Aneurism in Connection with the Abdominal
135 *a.* Aorta. Erosion of Vertebræ.

The preparation shows the bodies of four lumbar vertebræ, with their fibro-cartilages, and the corresponding portion of the abdominal aorta. Between the aorta and the vertebræ, communicating with the former by a round, smooth-edged aperture the size of a shilling, is the cavity of a "diffuse aneurism". The walls of the cavity appear to have been formed by consolidation of surrounding structures, and show no trace of true vascular coats. The posterior wall is furnished by the vertebral column, the bony structures of which are about half eaten away, while the fibro-cartilages remain intact.

The whole of the "aneurism" is not shown in the preparation. In the recent state it was of very large size, and extended in the subperitoneal tissues into the left iliac fossa, eroding the iliac bone. It had ruptured into the peritoneal cavity.

From the body of a man aged 30, who died in the Hospital. Severe pain in the left loin, hip, groin, and knee, had been present for more than twelve months. The aneurism had presented as a hard swelling in the left inguinal region for four or five months. Death was sudden.

Post-Mortem and Case Book. 1867. No. 17.

3667. Cystic Dilatation of the Internal Saphena Vein.

242 *a*. A globular tumour, the size of a chestnut, is seen in the preparation. From either side projects a rounded cord. Section of the tumour shows it to be a cyst filled with firm blood-clot. The walls of the cyst are about two lines in thickness; the outer layers of the clot are laminated, and the outermost adherent to the wall. The rounded cords prove to be veins, with greatly thickened coats. Their lining membrane is smooth, and continuous with that of the cyst. A bristle, as seen in the preparation, can be passed through one of them into the cyst.

The tumour appeared just below the knee in a woman aged 21, who had suffered from swelled veins from early childhood. For four years and a half it remained soft, blue, and painless, and looked like a swelled vein. After an attack of inflammation of the veins, it increased in size and became hard. Six months later, it was removed by Mr. Prescott Hewett.

Pathological Society's Transactions. Vol. xviii, p. 56.

3668. Thrombosis of the Internal Jugular Vein.

178 *a*. The left internal jugular vein is shown completely blocked by a fibrinous mass, which in the recent state was almost completely decolorized, and adherent to the wall

of the vessel. The latter structure showed no sign of disease.

From the body of a woman aged 34, who died in the Hospital of granular kidneys and pleuritis. The heart was hypertrophied, and all its valves, except the pulmonary, much thickened.

Post-Mortem and Case Book. 1870. No. 105.

VII.

DISEASES OF THE LUNGS, PLEURÆ, AND AIR-PASSAGES.

3669. Fracture and Dislocation of the Cartilages of the Larynx.
78 a. The cricoid cartilage is fractured anteriorly and posteriorly in the median line. Both the thyroid and the arytenoid cartilages are displaced from their connections with it. The thyroid shows a fracture in either ala, and both its superior cornua are broken off.

From the body of a woman aged 42, who was strangled on April 10, 1872. The injuries were inflicted by the grasp of the murderess' hand. At the trial, the question was raised by her counsel, whether the grasp of the hand were capable of fracturing the larynx (Casper's *Forensic Medicine*, New Syd. Soc.'s Ed., vol. i, p. 246). The possibility of such an event was clearly established by Dr. Wadham, Lecturer on Forensic Medicine to St. George's Hospital, who was called as witness in the case.

3670. Foreign Body in the Right Bronchus: Tracheotomy.
79 a. A piece of the stem of a clay tobacco-pipe, measuring $\frac{15}{16}$ inch in length, $\frac{3}{16}$ and $\frac{1}{4}$ inch in its two diameters, is impacted in the commencement of the right bronchus, which it just fills. It protrudes into the trachea, and nearly occludes the opening of the left bronchus. Its sharp end has produced a small ulcer on the left wall of the trachea. The opening made in the operation of tracheotomy is seen in the upper part of the tube.

From the body of a child aged 2, who died in the Hospital, nine days after the entrance of the foreign body. Breathing appeared difficult during life, and the respiratory sounds of the right lung were deficient, but the child seemed to be in no pain, and could swallow freely. Tra-

cheotomy was performed, but the foreign body was not detected. The child gradually sank.

After death, the base of the right lung was found to be hepatised; that of the left congested. The bronchial mucous membranes were coated with viscid mucus, that of the trachea with a layer of adhesive pus. The child was somewhat rachitic.

Post-Mortem and Case Book. 1873. No. 124.

3671. Laryngotomy: Unhealed Wound of the Operation.

141. The larynx is shown. A rod the size of a crow-quill is passed through a round hole in the middle line of the thyroid cartilage, which it just fits. The epiglottis and the tissues of the upper part of the larynx are irregularly thickened.

From the body of a man aged 48, who died in the Hospital. Laryngotomy had been performed eight years before, and for five years he wore a tube. The corroded tube, at the end of five years, fell to pieces, and a large fragment slipped down the trachea. The man experienced no inconvenience, except hoarseness of the voice, till eighteen months later, when laryngeal spasm set in. He was admitted into the Hospital, and Mr. H. Lee, enlarging the opening in the thyroid cartilage, which still remained unhealed, extracted the fragment in two pieces. Though no tube was again worn, the wound never cicatrised. Symptoms of laryngeal obstruction set in a second time after a drinking bout. Though they passed off, delirium supervened, and the man died in three days.

Post-Mortem and Case Book. 1873. No. 178.

3672. Necrosis of the Right Arytenoid Cartilage.

85 *a*. At the attachment of the right vocal cord to its arytenoid body an oval ulcer is seen, which exposes a necrosed portion of the cartilage.

From the body of a man aged 40, who died in the Hospital of pyæmia of nearly six weeks' duration. No laryngeal symptoms, previous to the onset of pyæmia, are recorded.

Post-Mortem and Case Book. 1872. No. 281.

3673. Syphilitic Disease of the Larynx.

139. The vocal cords and the portion of the larynx above them are the seat of irregular thickening and ulceration. The vocal cords are entirely destroyed. The epiglottis is thickened, but ulcerated only at its base. The soft palate, shown in the preparation, is unaffected.

The affection is supposed to have been of syphilitic origin. There is no further history.

Presented by Dr. ALDIS.

3674. Syphilitic Disease of the Larynx. (Tracheal Fistula.)
88 *a*. The epiglottis, the upper part of the larynx, and the vocal cords, are represented only by puckered cicatricial tissue. The glottis is not occluded. A minute fistulous channel, through which a bristle is passed, exists just below the cricoid cartilage, placing the tracheal tube in communication with the front of the throat. The cricoid cartilage is irregularly thickened in the neighbourhood.

From the body of a woman aged 38, who died in the Hospital with granular disease of the kidneys and syphilitic lesions of several organs. Tracheotomy had been performed for a laryngeal affection at the age of 17. Some round cicatrices, as of rupia, on the chest, were said to date from a skin eruption in childhood. Otherwise no clue was obtained to the date of the syphilitic lesions.

Post-Mortem and Case Book. 1879. No. 237.

3675. Ulceration of the Larynx, associated with Granular Kidneys.
142. A small ulcer, about one-third of an inch by one-fourth of an inch, is seen on the upper surface of either vocal cord, about its centre, partially covered by an adherent slough.

From the body of a man aged 41, who died, in the Hospital, of granular degeneration of the kidneys, suffering from aphonia and extreme dyspnœa.

Post-Mortem and Case Book. 1874. No. 176.

3676. Carcinoma of the Larynx.
109 *a*. An encephaloid mass, the size of a hen's egg, has grown from the left side of the larynx, within the thyroid cartilage, which it has expanded. It extends from the base of the epiglottis to the third ring of the trachea, and projects backwards into the œsophagus. No trace of the left vocal cord remains. The morbid growth has perforated and extensively destroyed the thyroid and cricoid cartilages, and has widely infiltrated the opposite half of the larynx. The tip of the left arytenoid cartilage appears on the upper aspect of the tumour. The laryngeal surface of the tumour is ulcerated. Microscopically, the growth presented the characters of carcinoma.

From the body of a man aged 45, who died in the Hospital. He was admitted with symptoms of laryngeal stenosis. He stated that the earliest symptom, aphonia, had appeared suddenly, three months before. The laryn-

goscope revealed only thickening of the upper parts of the larynx. Two days later, laryngotomy was performed. (The opening may be seen in the preparation, perforating a portion of the morbid growth.) Six weeks after the operation, a fatal spasm of dyspnœa occurred, at a time when the tube had been removed to be cleaned.

Post-Mortem and Case Book. 1867. No. 162.

3677. Carcinoma of the Bronchi.

28 *a.* The root of the right lung is shown; the main bronchus and one of its primary divisions being laid open. The adjoining bronchial glands are infiltrated with encephaloid carcinoma. The morbid growth extends along the walls of the bronchi, and in places has eaten through them and appeared in the interior of the tubes.

From the body of a man aged 24, who died, in the Hospital, of multiple carcinoma secondary to encephaloid disease of the right thigh and innominate bone. The spleen is shown in Series x (*vide infra*).

Post-Mortem and Case Book. 1869. No. 84.

3678. False-Membrane lining the Air Passages.

129. The main bronchi and the lower portion of the trachea are shown. The latter, and the right bronchus, contain a complete cast, formed of false-membrane, lying loose in their canals. Some patches of false-membrane are seen lining the left bronchus.

From the body of a lad aged 19, who died in the Hospital. He had been admitted for syphilitic ulceration of the palate and pharynx, which was treated by local application of calomel vapour. One day severe dyspnœa and febrile symptoms set in, and he died about thirty-six hours later.

False-membrane was found after death, lining the soft palate, fauces, epiglottis, larynx, trachea, and the right bronchial tubes to their minutest ramifications. The left lung was simply congested. The original ulcers of the throat had cicatrised.

Post-Mortem and Case Book. 1866. No. 336.

3679. Membranous Disease, affecting the smaller Bronchial Tubes.

96 *a.* The tongue and tonsils, the larynx, part of the trachea, and sections of the lungs and air-passages are shown. The tonsils, and the glands at the base of the tongue, are swollen. The delicate, patchy films, that coated the mucous lining of the larynx, are hardly to be detected

after preparation in spirit; but some patches of thicker membrane are still to be seen on that of the trachea, which, when recent, was much congested. A continuous false-membrane lines the bronchial tubes. It extends from the commencement of the main bronchi to their smallest visible ramifications, becoming the thicker, and adhering the more firmly, as their calibre diminishes. The lungs were deeply congested, and, in many places, ecchymosed. Considerable areas, near the surface, were consolidated by yellowish material resembling the products of "catarrhal pneumonia".

From the body of a lad aged 16, who survived his admission into the Hospital only a few hours, and from whom no history could be obtained.

Post-Mortem and Case Book. 1879. No. 78.

3680. Bronchiectasis.

80 a. The greater part of the left lung is shown. The lower lobe is replaced by a cavernous structure formed by dilatation of the bronchial tubes. The walls of the cavities are imbedded in a fibroid tissue that shows little trace of normal pulmonary structure. The pleural layers are firmly adherent. The upper lobe is very emphysematous, as also was the whole right lung.

From the body of a man aged 40, who died in the Hospital, with cough, dyspnœa, and dropsy of three years' date. The patient's condition precluded complete physical examination.

Post-Mortem and Case Book. 1870. No. 54.

3681. Bronchiectasis. Ulceration of the Bronchi.

49 a. The specimen is from the body of a woman aged 32, who was admitted into the Hospital in a state which precluded examination or interrogation, and died five days later.

The lung shown, the left, was found flattened against the outer wall of the thorax, and adherent to it, except at the base, by a thick layer of fibroid tissue which represented the pleura.

The flattened and compressed lung is shown in section. The thickness of the pleural investment is displayed. The lung is seen to be freely tunnelled by cavities of various sizes, which communicate with each other, and are in many places continuous with the bronchial tubes. These cavities, in the fresh state, were full of fetid pus, and lined with a greyish membrane, continuous with the reddish mucous-

membrane of the bronchi. Here and there the bronchial walls are excavated by small cavities.

The opposite lung, which was expanded to fill up the vacant space in the chest, exhibited patches of fibrosis which appeared to be of tuberculous origin.

Post-Mortem and Case Book. 1879. No. 136.

3682. Pleural Adhesions.

137. A small portion of a lung and the corresponding area of the thoracic wall, united by a mass of loose connective tissue bands.

No history. *Presented by* Dr. ALDIS.

3683. Bullet Wounds of the Lung.

1 *a.* The left lung has been traversed by two pistol bullets, which entered a little below the root, and passed backwards, upwards, and outwards. Rods have been passed through their channels. The lung is compressed, owing to the extensive hæmorrhage that took place into the pleural cavity. The two bullets, weighing together fifty grains, were found in the deep muscles of the back.

From the same case as Nos. 3458 and 3587.

Post-Mortem and Case Book. 1869. No. 321.

3684. Rupture of the Lung, without laceration of the Pleura.

4 *a.* Beneath the pleura, in various situations, are several large bullæ. They are shown in section. Most are empty; some contain a little blood-clot. In the fresh state they were filled with air and fluid blood. It did not appear that the air (or gas) was due to decomposition. The outer walls of the bullæ are formed by the pleura; the inner, by a thin layer of consolidated lung tissue. They are smooth internally.

From the same case as No. 3453. The patient, a man aged 25, had fallen from a height, rupturing his liver and spleen, fracturing his left wrist, and one left rib, which lacerated the corresponding lung; and rupturing his right lung as seen above.

Post-Mortem and Case Book. 1877. No. 264.

3685. Emphysema. Lobulation of the Lung.

7 *a.* No history.

3686. Grey Hepatization.

140. A section of a portion of hepatized lung, injected. The injection has penetrated the vessels of the subpleural tissue, but not those of the lung proper.

No history.

3687. Gangrene of the Lung. "Solid Œdema."

17 a. The whole right lung is shown. Its lower portions are excavated to form a large ragged cavity. What remains is consolidated. The pleura is universally adherent.

In the recent state the consolidated portions were entirely devoid of air. Their section presented an uniform pale grey, semi-translucent surface, mottled with pigmented streaks that marked the lines of the interlobular septa. On closer inspection, the surface was somewhat granular, and flecked here and there with patches of opaque white spots, the size of pulmonary vesicles. The tissue pitted slightly on pressure.

Microscopic examination showed the alveolar walls generally thickened by infiltration with the cellular products of inflammation. In many places the alveolar cavities were obliterated by collections of cells, so that the pulmonary tissue was solidified. In such situations many of the cells were somewhat elongated, and the granular matrix in which they were embedded showed a tendency to fibrillation. The alveolar cavities, when not obliterated, were for the most part empty, but in a few cases they were filled with products similar to those that infiltrated the walls.

A few tubercular patches were found near the apex of the opposite lung. The pericardium was coated with lymph.

The cavity in the right lung was filled with fetid *débris* and blood clot.

From the body of a man aged 43, who was admitted into the Hospital for prostatic stricture. He was transferred to the physicians for pulmonary symptoms, but no record of the case appears to have been preserved.

Post-Mortem and Case Book. 1880. No. 60.

3688. Thrombosis of the branches of the Pulmonary Artery.

131. The left pulmonary artery is shown, with the commencement of its branches. The latter are full of a firm white fibrinous substance, adherent with tolerable firmness to their walls. The thrombotic masses extend but a little way into the tube of the main vessel.

From the body of a woman aged 31, who died in the Hospital. She had been admitted for dyspnœa and dropsy of eighteen months' duration, dating from an attack of rheumatic fever; and died suddenly while taking her tea.

All the larger branches of the left pulmonary artery were found plugged, as seen in the specimen. The heart was hypertrophied, and weighed twenty-four ounces with its universally adherent pericardium. A little partially decolorised clot was found in the ventricles. Both pleuræ were roughened with lymph.

Post-Mortem and Case Book. 1868. No. 296.

3689. Thrombosis of the Pulmonary Veins.

128. A fibrinous cast is shown of the left auricle, the right pulmonary vein to its sixth or seventh ramifications, and the left pulmonary vein to its second division. In the recent state the cast consisted of firm decolorized blood-coagulum.

From the body of a man aged 50, who died in the Hospital. He had been admitted for gout and for dropsy dependent on granular degeneration of the kidneys. He suffered at times from fainting attacks. Twenty-four hours or less before death, he was attacked with rigors, and became extremely faint, though quite conscious. Death was sudden.

The heart, *post-mortem,* weighed 20 ozs., its walls being unduly thick. The mitral valves were thickened, and studded with urate of soda. The clot shown was simply pulled out of the pulmonary veins, being nowhere adherent.

Post-Mortem and Case Book. 1866. No. 152.

3690. Fibrosis of the Lung.

130. A portion of one lung is shown. The areolar planes are extensively thickened by fibroid tissue, especially around the minuter vessels and bronchi. The surface of the lung is lobulated, and the pleural layers partially adherent. The pulmonary tissue is honeycombed with emphysematous cavities. No trace of tubercle is seen.

From the body of a man aged 36, who died in the Hospital, with cough, dyspnœa, and dropsy of two years' date. One attack of hæmoptysis had occurred early in the case. Percussion resonance was generally dull over the chest, the respiratory sounds were creaking, and vocal resonance increased. The heart, after death, weighed thirteen ounces and a half: the right cavities were dilated, the auriculo-ventricular valves somewhat thickened. The liver was in an early stage of cirrhosis.

Post-Mortem and Case Book. 1867. No. 96.

3691. Fibrosis of the Lung.

130 *a*. A section of the lung is shown. Many of the areolar planes bounding its lobules and surrounding the larger vessels are thickened by a fibroid structure. The pulmonary tissue is uniformly somewhat emphysematous. No trace of tubercle appears. The pleural layers are adherent but not thickened.

No history.

3692. Scirrhus of the Lung.

25 *a*. The walls of the bronchial tubes, and the lymphatic channels lying beneath the pleura, are thickened with scirrhous tissue. Some thin flat expansions are also met with beneath the pleura, and a few minute nodules in the interior of the lung. The bronchial glands are carcinomatous. Both lungs were similarly affected, though one only is shown.

From the body of a woman aged 32, who died in the Hospital of carcinoma of various viscera, secondary to scirrhous tumour of the breast. The latter was removed eleven weeks before death.

Post-Mortem and Case Book. 1879. No. 168. *St. George's Hospital Reports,* vol. x, p. 33.

3693. Carcinoma of the Lung and Pleura.

138. A portion of the lower lobe of a lung is shown in section. It is studded with spheroidal masses of carcinomatous material, of various sizes. One small mass appears within a bronchial tube which has been laid open. A number of similar growths are attached, some by pedicles, to the pleura.

No history. *Presented by* Dr. ALDIS.

3694. Carcinoma of the Lung.

21 *a*. Encephaloid carcinoma has extended from the bronchial glands along the course of the bronchial tubes, some of which are thickened to the extent of a third of an inch. A portion of the base of the lung is shown in the preparation. The morbid growth extends to all the tubes that are perceptible to the naked eye.

From the body of a man aged 55, who died in the Hospital with carcinomatous growths in the skin and in most of the viscera.

A preparation of the intestines from the same case is shown in Series IX, as an example of intussusception.

Post-Mortem and Case Book. 1866. No. 193.

3695. Chondro-Sarcoma of the Lungs.

31 *a*. The lung shown in the preparation is thickly studded with tumours of round and ovoid shape, of all sizes up to that of a pigeon's egg. The superficial ones project prominently from the surface. They are firm and elastic. To the naked eye they resemble cartilage. Under the microscope they are seen to consist of round and oval, with a few elongated and fusiform, cells, in a scanty intercellular matrix. In a very few spots, the matrix is more evident, and the cells approach the character of cartilage cells.

Both lungs were similarly affected, though the right only is shown. Growths of the same character were found on the pericardium.

From the same case as No. 3498.

Post-Mortem and Case Book. 1873. No. 36.

3696. Sarcoma of the Lungs.

31 *b*. The whole of the right lung is replaced by a sarcomatous mass, with the exception of the extreme apex and the portion adjoining the anterior edge, which are carnified from compression. The morbid growth has attached itself to the fifth, sixth, and seventh ribs, which are shown in the preparation. It is softened and broken down in the middle.

Nearly the whole of the upper lobe of the left lung is replaced by a similar growth. A large cavity, filled with blood clot, is seen in its midst. Nodules of the same material are imbedded in the adjacent parts of the lower lobe.

The growths, in the fresh state, were tolerably solid, opaque, and white, but easily lacerable. Their internal portions were softer, and contained some gritty nodules. Under the microscope, they were seen to be formed of elongated cells, with a quantity of coarse fibres.

From the body of a lad aged 17, who died in the Hospital on Feb. 28, 1877. The pulmonary growths, which appeared to be of about nine weeks' date, were consecutive to a myeloid tumour of the left tibia, for which amputation had been performed on June 15, 1876.

Post-Mortem and Case Book. 1877. No. 70.

3697. Hydatids of the Lung.

52 *a*. A globular cavity, the size of an orange, is seen near the base of the lung (the left), almost immediately beneath the pleura. It has been laid open in preparation, and the proper cyst wall, which it contained, is shown separately.

The patient, a man aged 46, died in the Hospital, in consequence of a severe injury, which not only ruptured the hydatid cyst, but fractured four ribs on the same side. Hæmorrhage took place into the pleural cavity and into the air-passages, and air penetrated into the former; compressing the lung, as seen in the specimen.

Post-mortem and Case Book. 1868. No. 158.

3698. Vomica immediately beneath the Pleura.
133. A section of a portion of lung, showing a number of small vomicæ. One is immediately beneath the thickened and adherent pleural layer, of which its outer wall is formed.

No history. *Presented by* Dr. ALDIS.

3699. Vomica.
136. A section of part of a lung, displaying a large ragged vomica, around which are seen some disintegrating caseous masses.

No history. *Presented by* Dr. ALDIS.

3700. Large Basic Vomica. (Paracentesis.)
58 *a.* The whole of the left lung and its appendages are shown. The layers of the pleura are adherent throughout, and much thickened. The lower fourth of the lung is replaced by an empty cavity. The roof of the cavity is ragged, and formed by pulmonary tissue; the sides and floor by thickened pleural membrane, upon which a few traces of lung structure are seen. The remainder of the lung is thickly studded with disintegrating caseous matter.

From the body of a man aged 42, who died in the Hospital, to which he had been transferred from another on the latter's closing for repairs. Under the belief that an empyema existed, paracentesis thoracis had been performed nineteen days before the patient's transfer. Free discharge of purulent fluid went on till his death, which occurred, owing to gradual exhaustion and increase of dyspnœa, ten weeks after the operation. The wound was dressed antiseptically throughout; and no symptoms of blood-poisoning were observed. It does not appear that any marked change, for the better or for the worse, followed the operation.

The right lung was found to be in a similar state to the upper parts of the left; and, in addition, showed many hard grey tubercles.

Post-Mortem and Case Book. 1879. No. 259.

3701. Vomica communicating with Bronchial Tubes.
135. A section of a portion of a lung, displaying a ragged vomica, from which several small bronchial tubes lead.
No history. *Presented by* Dr. ALDIS.

3702. Vomica communicating with the Pleural Cavity.
134. A section displaying a sub-pleural vomica. Its outer wall, formed by thickened pleura, is perforated by a round hole the size of a crow-quill.
No history. *Presented by* Dr. ALDIS.

3703. Encysted Vomica.
36 *a*. A portion of a lung is shown in section. A vomica is displayed, having a cavity hardly larger than a pea, but dense fibroid walls, a quarter of an inch thick in places.
From the body of a man aged 33, who died in the Hospital in consequence of injuries. Both lungs displayed miliary tubercles and caseous deposits in large amount.
No history of the pulmonary affection.
Post-Mortem and Case Book. 1870. No. 235.

3704. Cicatrisation of a Vomica.
132. The upper portion of a lung is shown in section. The extreme apex is puckered and contracted by cicatricial tissue, in which some small caseous masses are imbedded. The pleura is here adherent.
From the body of a man aged 49, who died in the Hospital of lardaceous and granular disease of the kidneys (one kidney is shown in the preparation). The liver and spleen were lardaceous also. No appearance of tubercle or of recent phthisis was found.
Post-Mortem and Case Book. 1868. No. 241.

3705. Caseous Pneumonia.
43 *a*. The apex of a lung is shown in section. It is uniformly infiltrated with caseous matter. The interior is excavated by an irregular cavity having no proper walls or lining. Some large branches of the pulmonary artery ramify, almost naked, in the interior of the cavity.
From the body of a man aged 51, who died in the Hospital three days after admission. He was much emaciated and greatly prostrated, and suffered from cough and dyspnœa—of ten days' date only, as far as his statements could be understood. Percussion was dull over the apex shown (the left), and loud gurgling sounds were heard.
The caseous condition was found, *post-mortem*, to extend

throughout three-fourths of the affected lung. The right was thinly studded with miliary tubercles. The lower portions of the left pleura were coated with lymph, the peritoneum was unduly vascular, the liver cirrhosed, and the kidneys somewhat granular.

Post-Mortem and Case Book. 1870. No. 227.

VIII.

DISEASES OF THE NERVOUS SYSTEM.

3706. Hæmorrhage beneath the Dura Mater.

78 *a.* The dura mater covering the left hemisphere is lined on its inner surface with a thin fibrinous layer.

From the body of a man aged 40, who died in the Hospital. He had suffered for several months from loss of mental power, hesitation in the speech, and wasting of the right limbs; and for about five weeks from rapid decline of health, condition, and mental faculties. A fortnight before death a "fit" was the prelude to a state of semi-consciousness, with twitchings of the muscles of the right side of the body; in which he lay till the fatal termination.

It was stated that he had received a severe blow on the top of the head, wounding the scalp, three years before the onset of the symptoms.

Post-Mortem and Case Book. 1875. No. 288.

3707. Abscess between the layers of the Dura Mater.

67 *a.* The abscess is of the size of a hazel nut. It is situated between the layers of the portion of dura mater that covered the right petrous bone, which was the seat of inflammatory disease extending from the external ear. The surface of the cerebellum, in its neighbourhood, was coated with pus.

The patient, a boy aged 12, had suffered from otorrhœa, with pain and deafness, for three years, and died of pyæmia.

Post-Mortem and Case Book. 1866. No. 322.

3708. Gumma of the Dura Mater.

235. The growth is irregularly circular, about an inch in diameter, and a quarter of an inch in thickness. It is

composed in part of perfectly formed fibres, in part of embryonic tissue, and in part of granular *débris*.

Similar growths were found elsewhere in the dura mater, in the pia mater, and in the liver (*vide infra*, Ser. IX).

Post-Mortem and Case Book. 1872. No. 60.

3709. Sarcoma of the Dura Mater.

89 *a*. A tumour about the size of a hazel nut grows from the inner surface of the dura mater, covering the posterior aspect of the left petrous bone, near its base.

Microscopic examination showed the growth to consist of cells in great numbers, of various shapes and sizes, with clearly defined nucleolated nuclei. These cells were scattered somewhat irregularly in a delicate fibroid stroma. There was for the most part no very definite arrangement of the elements of the growth, but here and there, in parts of the various sections examined, a distinct elongation of the nuclei, a tendency in the cells to become spindle-shaped, and a parallel arrangement of the fibroid stroma were detected.

From the body of a man aged 42, who died in the Hospital of softening of the brain, consequent on thrombosis of its arteries. (*Vide infra*, No. 3732.)

Post-Mortem and Case Book. 1870. No. 110.

3710. Glioma attached to the Dura Mater.

237. A rounded tumour, of the size of a large chestnut, is attached to the dura mater of the right cerebellar fossa of the occipital bone. It consists, microscopically, of small round cells of uniform size, closely packed in a scanty granular matrix. It probably originated in the cerebellum, the adjacent portions of which were much softened. The membranes of the brain were unduly vascular, and the lateral ventricles contained an excess of clear fluid; otherwise the brain was natural.

From the body of a girl aged 7, who had suffered from vomiting for twelve months, from headache and constipation for two. Death was preceded by strabismus and convulsions. The intelligence was unimpaired.

Presented by DR. JOHN W. OGLE.

3711. Meningocele.

82 *a*. The preparation shows the occipital bone, with the meningocele attached; and a portion of the brain in section, the ventricles being laid open. The tumour is of the size of a duck's egg, and is formed by protrusion of

the membranes through the occipital foramen. The arch of the atlas is incomplete, and the membrane that replaces the deficient portion enters into the formation of the neck of the sac. The cavity of the sac is divided by incomplete septa into numerous communicating loculi. The channel of the neck (through which a bristle is passed) is extremely narrow, and leads directly into the fourth ventricle. Both the fourth ventricle and the third are natural, but the lateral ventricles are distended to at least four times their natural size.

From the body of a child aged 7 months, who died in the Hospital. The tumour was congenital, and, at birth, had attained the size of a walnut. The patient was under Mr. Holmes' care, at intervals, during the last ten weeks of life. The cyst was tapped on two occasions, and weak solutions of iodine injected. Neither benefit nor harm resulted. The child died of capillary bronchitis, probably due to exposure.

A drawing of the tumour is preserved in Series XXI (*vide infra*).

Post-Mortem and Case Book. 1865. No. 187. *St. George's Hospital Reports.* Vol. i, p. 35.

3712. Hæmorrhage into the Arachnoid Cavity.

74 *a.* A thick fibrinous membrane, that was found covering the whole of the left hemisphere of the brain, except the base. Its thickest part is that which covered the upper and outer aspect of the hemisphere. In the fresh state, it was of a reddish-brown colour, firm, and elastic. It still preserves a shade of reddish-brown.

The corresponding portion of dura mater is preserved with it.

From the same case as Preparation No. 3438.

There is no history of any injury to the head.

3713. Blood Cyst of the Arachnoid.

79 *b.* The cyst covered the whole left hemisphere of the brain. Its upper surface was firmly adherent to the dura mater; its lower surface was covered by a smooth, shining membrane. It contained a little dark-coloured fluid, in which no corpuscles could be detected by the microscope. The brain was healthy. The heart's walls were fatty, and its valves atheromatous.

From the body of a man aged 66, who died in the Hospital. For a fortnight before admission he had been restless, talkative, and fidgetty, and had rambled in his mind. In the Hospital he was very talkative, but would

answer questions with some degree of coherence. He was restless and troublesome, throwing off the clothes and getting out of bed. He passed his motions under him, and was troubled with retention of urine; but there was no paralysis of the limbs or face. The heart-sounds were feeble, the pulse slow; the urine pale, and of low specific gravity, but non-albuminous. A bed-sore soon formed.

A fortnight after admission he was noticed to be dull and stupid. A fit soon followed, succeeded by aphasia and right hemiplegia, with dilatation of the left pupil. The faculty of speech partially returned; but the bed-sore extended, and the patient died eight days later.

It was said that he had been in great distress, owing to the death of his wife, before the onset of the symptoms.

Post-Mortem and Case Book. 1868. No. 331.

3714. Purpura.

14 *b.* The base of the brain is shown. A recent blood-clot, about three-quarters of an inch in depth, lies beneath the membranes, covering the base of the left occipital and spheno-temporal lobes, which are softened and disorganised in the neighbourhood. Extravasated blood is seen along the track of the meningeal veins for some distance around. Recently extravasated blood was found at the post-mortem examination externally to the meninges of the left occipital, spheno-temporal, and parietal regions. No blood appeared in the ventricles. The arteries were healthy, and the source of the hæmorrhage was not apparent.

From the body of a woman aged 32, who died in the Hospital on the twentieth day of an attack of purpura. Delirium and vomiting excepted, no symptoms referable to cerebral lesion appeared during life.

Post-Mortem and Case Book. 1879. No. 314. *St. George's Hospital Reports.* Vol. x, p. 29.

3715. Purpura.

14 *c.* The base of the brain is shown. Submeningeal hæmorrhage has taken place over the base of the left occipital and spheno-temporal lobes, to a less extent over the base of the right occipital, and to a slight extent over the anterior part of the left frontal lobe. In the ventricles, the remains of some decolorised clots are seen. The submeningeal extravasations are very shallow, but the left occipital lobe is softened and broken down in their neighbourhood.

At the post-mortem examination, the whole brain was

covered with recent blood-stained fluid, external to the meninges; the ventricles were filled, and the dura mater ecchymosed on both surfaces. The right temporal bone (Prep. No. 3716) was infiltrated with pus, and the tympanic membrane ruptured.

From the body of a boy aged 17, who died in the Hospital, on the thirty-sixth day of an attack of illness, which assumed a purpuric character.

The clinical history of the case extends over thirty-five days, not including a week or so of cough previously. The onset was sudden, with shivering and pain in the abdomen, to which severe headache was added next day. The cough became troublesome. After a week, the patient was sufficiently recovered to go to work; but, shortly, had to lay up for two or three days, owing to a return of the shivering, accompanied by vomiting and augmented headache. Emaciation proceeded; the bowels were constipated; diaphoresis was profuse at night.

On the eighteenth day, the pain in the head became very severe, and the patient grew restless at night, calling out, grinding his teeth, and trying to get out of bed.

When admitted, on the twentieth day, he was in a listless semi-conscious state, though rational; tremulous and dusky, with a temperature of 103°—104.6°, and all the appearances of high fever. The abdomen was tympanitic, and tender in its lower region.

From the following evening till the twenty-fourth, he lay in a state of muttering delirium, which became noisy at night. Under salicylate of soda (120 grains daily), prescribed on the twenty-first, the temperature fell rapidly below 97°; but it mounted again when the drug was countermanded on the twenty-third.

From the twenty-fifth, the mind was clear, the headache less, and limited to the right mastoid region, and no tenderness was found in the abdomen. The bowels acted regularly, the appetite improved, and the tongue partially cleaned. Full doses of salicylate being resumed from the twenty-fifth, the temperature, 103° that evening, reached the normal by the twenty-seventh; when the amount of drug was reduced to eighty grains daily. Thrombosis of the veins of the left leg was manifest on the twenty-ninth, and a discharge from the left ear, where an old perforation of the tympanum existed, was noticed on the thirtieth. The evening temperature marked 102° and 102.6° on these two dates, but gradually declined; and, on the thirty-fourth, was as low as 96°.

Bed-sores began to form on the thirty-fourth. On the

night of the thirty-fifth, delirium returned, and the temperature rose to 100°. Next day, the patient was comatose. The temperature continued to rise, reaching 101.6° in the evening; when, without further symptom, death took place.

The pupils acted naturally throughout, but some photophobia was displayed on admission. Twitching of the facial muscles appeared on the twenty-first, subsiding gradually till the twenty-third. A systolic murmur, culminating one inch above the apex-beat, was heard over the heart and left flank. The urine was albuminous, and contained, on the twenty-seventh, a trace of bile, some leucin, and a great deal of indican. (*St. George's Hospital Reports.* Vol. x, p. 28.)

3716. 14 *d.* The Right Petrous Bone from the same case as Preparation No. 3715, shown in Section.

Post-Mortem and Case Book. 1879. No. 147.

3717. 14 *a.* Hæmorrhage extending from the Spinal Canal into the Ventricles of the Brain.

A portion of the brain is seen in section, showing recent blood-clot in the third ventricle, the "iter", and the fourth ventricle.

From the same case as Preparation No. 3568.

3718. 233. Cerebro-Spinal Meningitis.

The base of the brain is shown, and the lateral ventricles are exposed. Soft semi-purulent lymph has accumulated in the subarachnoid space; particularly on the under surface of the cerebellum, around the pons, and along the sylvian fissures. The layer of lymph may be traced through the transverse fissure into the lateral ventricles, which it partially lines, forming a thick coating to the choroid plexuses. The ventricles are unduly large.

In the fresh state, the pia-mater in contact with the inflammatory exudation was intensely congested, and the ventricles were distended with a greenish, rather turbid fluid, slightly alkaline, and highly albuminous. The cerebral substance was unaltered. The coating of lymph extended in the spinal arachnoid cavity the whole length of the cord.

From the body of a child aged 6 months, who died in the Hospital for Sick Children, on the fifteenth day of an attack of cerebro-spinal meningitis.

Pathological Society's Transactions. Vol. xx, p. 22. *Presented by* Dr. DICKINSON.

3719. Dermoid Cyst.

100 *a*. The cerebellum is shown. Between the two hemispheres, beneath the posterior extremity of the vermiform process, is seen a dermoid cyst, the size of a sparrow's egg. Its wall is thin, and, microscopically, is found to be composed of two layers; the outer formed of long, slightly wavy fibres, interspersed with numerous elongated cells; the inner of several strata of small round cells, resembling those of the cutis, the section terminating in a very irregular outline. In one specimen, a third layer, of perfectly developed squamous epithelium, was seen internally at one spot, and the subjacent cells, which were in less abundance at that spot than elsewhere, exhibited the gradation from the round to the scaly type that is seen in the skin.

From the cellular layer grow the hairs that are seen in the specimen filling the interior of the cyst. Their matrix is rudimentary—merely a group of small round cells—and their disposition irregular. A few glandular ducts are seen microscopically in the thickness of the cyst wall.

The cyst wall is in close connection with the arachnoid on every side, and has no attachments to the pia mater. The arachnoid is unduly thick in the neighbourhood, and along the inferior aspect, of the vermis. (See No. 3720.)

3720. A Portion of the Occipital Bone, from the same case as

100 *b*. No. 3719, with the Dura Mater lining it.

To the dura mater in the neighbourhood of the torcular, a portion of the cyst wall, with its arachnoid covering, adheres by a mass of inflammatory lymph, which shows, under the microscope, puriform cells and large epithelial scales. In connection with the mass of lymph, is an unusually large vascular foramen, conveying a wide vein from the torcular to the exterior of the skull (a bristle is passed through the vein). By the side of the vein the inflammatory deposit extends to an abscess cavity situated under the scalp in the suboccipital space; originally of the size of a walnut, and filled with grumous pus. In the recent state the vein itself contained a few drops of puriform fluid, and some fine hairs, and a similar fluid filled the dermoid cyst. The lateral ventricles of the brain were distended with clear fluid.

From the body of a boy aged 11, who died in the Hospital. He had enjoyed good health till seventy-six days before his death, when he received a blow on the top of his head. From that time headache, frequent vomiting, fretfulness, nocturnal cries, and constipation were present.

The patient was unconscious for five days or so, about a month after the accident. He was admitted on the sixtieth day, greatly emaciated and drowsy, with the pupils slightly irregular; but complaining of nothing but weakness. The abscess under the scalp was opened on the sixty-first, and some blood, mixed with pus, evacuated. The wound sloughed, and the boy died sixteen days later.

The left kidney and ureter were found to be entirely absent.

Post-Mortem and Case Book. 1878. No. 207. *St. George's Hosp. Reports.* Vol. ix, p. 152.

3721. 73 *a.* Arachnoid Membrane and Pia Mater, very Vascular and greatly Thickened, and having Peculiar Bodies attached to their Inner Surface.

The smaller portion of membrane, which was taken from the left cerebral hemisphere, is much thickened and very vascular, and correspondently the pia mater presents three small cysts, which, when recent, were not unlike those often found in connection with the choroid plexuses. The other and larger portion, which was taken from the right cerebral hemisphere, presents a similar cyst. The veins of the pia mater and arachnoid are much enlarged, and one of the cysts above described is seen to be formed by an enlarged vein, which is somewhat varicose and hardened, apparently by calcareous deposit, and surrounded by a kind of capsule. In another place a pendulous body exists, apparently originating in an altered vein. It is expanded towards its free extremity, and perforated by an opening, through which passes a small rounded substance, which is probably also an enlarged vein.

From the body of a man aged 47, who was admitted into the Somerset Lunatic Asylum, in a very excited and incoherent state, suffering from severe epileptiform attacks, and consequent prostration. He died on the third day after admission. He had been subject to such fits for nine years.

Pathological Society's Transactions. Vol. xvii, p. 5.

Presented by Dr. JOHN W. OGLE.

3722. 117 *b.* Thrombosis of the Sinuses.

Portions of the dura mater are shown, with its sinuses, which are occupied by firm coagulum. Nearly all the sinuses were so filled. In the longitudinal, occipital, and right lateral, the clots were pale and beginning to soften; in the rest they were of more recent formation. The right

temporo-sphenoidal lobe was extensively softened, and its superficial veins blocked. The temporal bones were healthy. The left iliac veins were also occupied by adherent coagulum.

From the body of a girl aged 16, who died in the Hospital. She was admitted in a delirious condition, complaining of severe pain about the right mastoid process, which shot downwards and upwards, and of 'thumping' sensations in the chest, with nausea and constipation. She was well nourished, but anæmic to an extreme degree. Salicylate of soda was given for the first forty-eight hours, at the end of which time a blister was applied to the nuchal region, and five grains of calomel administered. From the fourth day, treatment was continued with bromide and iodide of potassium, and brandy. The pain lessened from the first day; the delirium increased after taking the salicylate, but diminished from the fourth day. On the fifth, loose action of the bowels commenced. On the sixth, much pain was complained of in the temporo-maxillary articulations, which almost prevented the mouth being opened. About noon, drowsiness set in, and from that time alternated with low muttering delirium, till the case ended fatally on the thirteenth day; the bowels being either confined or much relaxed, and the pulse very frequent and very weak.

During the last two days the right knee was noticed to be swelled and painful (salicylate of ammonia was combined with the other treatment in consequence). The left pupil was larger than the right on the third and sixth days. On the eleventh the comparison was reversed. On other days no inequality was observed. Muscular rigidity was never present. No history of the case previous to admission could be obtained. (*St. George's Hospital Reports.* Vol. ix, p. 49.)

Post-Mortem and Case Book. 1877. No. 339.

3723. Thrombosis of the Cerebral Sinuses.

117 *d.* The dura mater from the same case as No. 3725, showing the sinuses blocked with firm coagulum.

3724. Thrombosis of the Cerebral Veins.

117 *e.* Parts of the brain and dura-mater are shown. The straight sinus and the venæ Galeni and their branches to their minutest ramifications are blocked with a firm coagulum, which was, in the recent state, red, mottled with streaks and patches of white. The clot was not adherent to the walls of the vessels. The other sinuses

and the right internal jugular vein contained only the ordinary *post-mortem* coagula. The walls of all the venous cavities were healthy, and nothing was found to account for the thrombosis. The lining of the ventricles was congested, and the septum softened; otherwise the brain was in a healthy state, and except an undue softness of the heart's wall, and a catarrhal condition of the uterus, with abrasions about the os, nothing remarkable was found elsewhere.

From the body of a woman aged 20, who died in the Hospital. Admitted at four o'clock P.M., she was semi-comatose, *i.e.*, she shut her eyes when a finger approached, resisted passive motion, moved her limbs when they fell on hard edges, clutched at a stethoscope when applied, and the like, but gave no other signs of consciousness, and was unable to swallow. The pupils were natural. She was extremely anæmic, though well nourished; the legs were slightly œdematous. Much "bronchitic" sound was audible in the chest; the heart's apex-beat was felt in the fifth space and nipple-line; a systolic murmur culminated in the second left space; the pulse was full and strong—120 on admission, 90 an hour later. At five P.M. the pupils suddenly became contracted and insensitive, and coma complete. The pulse grew weaker and slower. In this condition the patient remained till death, at two A.M., next day.

All the history obtainable was, that she had complained of headache for a month, and of pain in the left flank for a week; and for four days had been very ill in bed, passing her urine involuntarily; the severe symptoms having started with sudden numbness of the feet. (*St. George's Hospital Reports.* Vol. ix, p. 49.)

Post-Mortem and Case Book. 1877. No. 211.

3725. Thrombosis of the Cerebral Veins.

117c. The whole of the brain is shown in various sections. The venæ Galeni and their tributaries, as well as the veins on the surface of the hemispheres, are blocked with firm clot. In the recent state the clot was of a red colour, but contained short lengths of an opaque white or grumous material blended with it. The left choroidal vein was distended with blood, and slight hæmorrhage had taken place into the plexus. Numerous punctiform extravasations were noticed in the centre of either optic thalamus, and the corpora striata were bright pink from capillary fulness. The brain-tissue was throughout congested and firm. The arteries were empty.

Thrombosis extended into the sinuses (Preparation No. 3723) and into the upper portion of the internal jugular veins.

Under the microscope, the neuroglia and vessel-walls of the optic thalami showed excessive nucleation; the latter were partly converted into a homogeneous substance that stained deeply with carmine, and many of the smaller vessels were blocked with coagulum.

The left ventricle of the heart was slightly hypertrophied; the liver, kidneys, and spleen were the seat of unimportant fibroid changes; the lungs were affected by ulcerative broncho-pneumonia.

From the body of a woman aged 32, who died in the Hospital. The onset of the case was with drowsiness, followed, after several hours, by gradual loss of power in the left arm and leg, beginning with the arm. From the fifth day, paralysis of the left side of the face was noticed, and the mind wandered at times. On the morning of the seventh, the patient said she was losing her speech, but recovered it after her husband "stroked" her jaw. In the afternoon she was admitted.

Almost complete paralysis, without, apparently, loss of sensation, was then found in the left arm, leg, and cheek. The muscles of these limbs occasionally stiffened, so that the limbs retained any position imposed on them, and the left hand was at times agitated rhythmically. The pupils were natural. The patient seemed at times unconscious; at others, would speak a few words in a whining tone. The eyes were prominent, and stared wildly about; the whole aspect was "strange" looking. The countenance was pale, the skin greasy, the breath foul.

A suspicion of hysteria was dispelled by testing the condition of the limbs with the broken current. After its application, unconsciousness was no longer simulated, but the peevish whine continued unchanged.

No particular change was observed till after the lapse of another week, when the patient became comatose. Both hands were usually clenched, but power seemed to be retained to a certain degree over the right limbs. The pupils continued to act. Death ensued on the twentieth day of the attack.

But for scantiness and irregularity of menstruation for the twelve months previous, the patient was of healthy constitution. (*St. George's Hospital Reports.* Vol. x, p. 49.)

Post-Mortem and Case Book. 1879. No. 30.

3726. Atheroma of the Cerebral Arteries.
110 *a*. The larger arteries of the base of the brain are shown. Their walls are extensively affected by atheromatous disease. In their interior, patches of firm clot are seen adherent to the walls.

From the same case as Preparation No. 3739.

3727. Aneurism of the Anterior Communicating Artery: Rupture.
113 *a*. The arteries of the anterior part of the base of the brain are shown. On the upper aspect of the communicating artery is an aneurism the size of a large pea. The aneurism has ruptured. At the post-mortem examination, a recent globular clot, as large as a Tangerine orange, was found in the left frontal lobe, breaking through the cortex just externally to the olfactory nerve. Minute secondary aneurisms appear by the side and on the surface of the primary one. The arteries are otherwise healthy, as were all the cerebral arteries. The brain tissue was normal. The lungs were broncho-pneumonic, the heart and liver fatty, the kidneys pale and flabby.

From the body of a woman aged 27, who died in the Hospital. She had been in good health till suddenly attacked with convulsive fits, four of which occurred in the course of nine hours. Thenceforth severe pain was felt on the top of the head, from the brow to the occiput; for which she was admitted on the seventeenth day. The pain being aggravated at night, the affected region being tender to touch, and a copper-coloured rash present on the trunk, the treatment adopted was anti-syphilitic.

A few hours after admission she grew restless, and tried to get out of bed. An hour later, the limbs suddenly stiffened, and she became apparently unconscious. She remained so for two hours, the limbs rigid and twitching occasionally, the pupils varying between contraction and dilatation.

Till the twenty-fifth she lay in a drowsy, half-conscious state. During the night following, a fit of convulsions, commencing in the left arm, occurred; followed by coma, which ended fatally in about thirty-six hours.

Constipation was a marked symptom from the first. Vomiting occurred on the twenty-fourth and twenty-fifth. The urine was free from albumen. (*St. George's Hospital Reports.* Vol. x, p. 52.)

Post-Mortem and Case Book. 1879. No. 176.

3728. Aneurism of the Right Posterior Cerebral Artery: Rupture.
194 *a*.

The arteries of the base of the brain are shown, dissected out. On the right posterior cerebral is a globular aneurism, about twice the size of a pea. It is full of firm fibrinous deposit. Its wall is ruptured in one place, and some coagulum is adherent to the vessel just beyond the aneurism. In the recent state, freshly extravasated blood was found beneath the membranes of the cerebellum. A small secondary aneurism has commenced just beyond the main one.

In addition to the above lesion, a gelatinous decolorised clot was found in the left lateral ventricle, and a small patch of the corresponding optic thalamus was the seat of "red softening". The septum lucidum was disorganised. Infarcts of old date were found in the spleen, and a cicatrix in the left kidney. The mitral valves were fringed with vegetations.

From the body of a woman aged 20, who died in the Hospital. She was admitted in consequence of an "apoplectic" attack, followed by right hemiplegia and aphasia. The condition steadily improved till the ninety-seventh day from the fit, when a second transitory attack of unconsciousness was observed. On the hundred and first, a series of fits occurred, and the paralysis became again more marked. On the hundred and eightieth day, increasing pain in the head ushered in a condition of coma, which ended fatally on the hundred and eighty-fourth.

Complete loss of audition in the right side was detected several months after admission. The signs of cardiac valve-disease were present throughout the case.

Post-Mortem and Case Book. 1876. No. 33.

3729. Aneurism of the Middle Cerebral Artery: Rupture: Instantaneous Death.
112 *b*.

The intra-cranial branches of the internal carotid arteries are shown, dissected out. They are atheromatous. The left middle cerebral is dilated at the point where it breaks up into branches. A sacculated aneurism, hardly as large as a pea, is borne upon the dilated portion. The aneurism has ruptured. Hæmorrhage was found to have taken place, but to small extent only, into the subarachnoid space.

Death was almost instantaneous, while the patient, a

woman aged about 73, who had previously appeared in perfect health, was sitting at dinner.

The heart and kidneys were practically healthy.

Pathological Society's Transactions. Vol. xxiii, p. 1.

Presented by Dr. DICKINSON.

3730. Aneurism of the Inferior Cerebellar Artery: Rupture.
111 *b.* The aneurism is of the size of half a pea. Rupture has taken place.

No history.

3731. Cystic Tumour of the Brain, apparently of Aneurismal
112 *a.* origin.

The preparation shows a cyst, the wall formed of firm fibrous tissue, having the shape of a flattened sphere, the diameters of which are rather more, and rather less, than an inch, respectively. A large vessel, apparently the middle cerebral, is, for the distance of an inch, adherent to the outside of the cyst; while a small artery, corresponding in position to the anterior cerebral, passes in contact with it for about a quarter of an inch, and then is lost upon the wall, the outer coat of the vessel blending with the external layers of the wall, and the canal becoming obliterated. The inner layers of the wall form a distinct lining membrane, the general smoothness of which is interrupted by hard irregular masses of cretaceous matter, some of which project into the cavity. The masses consist of granular amorphous particles, that yield bubbles when treated with hydrochloric acid, mixed with plates of cholesterin, and bright red masses of hæmatin.

The cyst was situated in the left corpus striatum, in contact with the lateral ventricle. When punctured, it emitted clear fluid, containing cholesterin in considerable amount. The remains of an old hæmorrhagic clot were found in the left posterior lobe of the cerebrum.

From the body of a maniac, subject to epileptiform attacks, who died of rupture of the aorta.

Pathological Society's Transactions. Vol. xxii, p. 115.

Presented by Dr. JOHN HAWKES.

3732. Thrombosis of the Cerebral Arteries: Channelling of the
115 *a.* Clot.

The greater part of the brain is shown. Both vertebral arteries, the basilar, the internal carotids, the anterior and middle cerebrals, are occupied by firm coagulum, channelled in the centre. The vertebral and carotid arteries are dilated in their thrombosed portions. The left pos-

terior lobe of the cerebrum and the left lobe of the cerebellum are softened, as are also the left inferior frontal convolution and island of Reil. The tumour of the dura mater, shown in Preparation No. 3709, was found also.

From the body of a man aged 42, who died in the Hospital. He was admitted with left hemiplegia, the sequel of a "fit" about a fortnight previously. He complained of headache, and had slight difficulty in micturition. Six days after admission, a convulsive attack occurred, succeeded by loss of power and sensation in the right side, aphasia, and gradually deepening coma, which ended fatally in four days more.

Post-Mortem and Case Book. 1870. No. 110.

3733. Embolism of both Internal Carotid Arteries.

192 *a*. The main arteries of the base of the brain are shown. Both internal carotids are completely occluded with firm fibrinous coagulum. The clot in the right extends into the anterior and middle cerebrals. The right middle cerebral is plugged also at the point where it breaks up into branches; and clot, only partially decolorised when recent, fills the interval. The walls of the vessels are healthy.

From the body of a woman aged 31, who died in the Hospital. She had been attacked, while dressing, with right hemiplegia and aphasia. The condition improved slightly till the sixth day, when she "fainted". The left side was now found to be powerless, and the patient quite speechless. Consciousness was soon lost, and she died on the tenth.

The right hemisphere of the brain showed a patch of softening, the size of a hazel nut, just externally to the corpus striatum. Otherwise the cerebral substance appeared healthy. Fibrinous vegetations fringed the mitral and tricuspid valves, and decolorised fibrin was entangled in the walls of the heart's cavities (see Preparation No. 3609).

Post-Mortem and Case Book. 1868. No. 87.

3734. Embolism of the Left Middle Cerebral Artery: Channelling of the Clot.

192 *b*. The obstructed portion of artery is shown, a bristle being inserted through the channel.

From the body of a woman aged 47, the subject of granular degeneration of the kidneys and disease of the heart valves, who died in the Hospital. She was admitted in a dull, stupid state. Nine days afterwards occurred an

attack of convulsions. Twenty-one days later, two more, followed by a state of right hemiplegia, with deepening coma, which ended fatally in six days.

The left corpus striatum was found to be softened and completely disorganised. The whole brain was shrunk, and the calvaria thickened by deposit of bone on its inner surface. Vegetations existed on the mitral valves, and an old infarct was seen in one of the kidneys.

Post-Mortem and Case Book. 1869. No. 120.

3735. Embolism of the Right Middle Cerebral Artery.

195 *a.* The artery alone is shown. It is occluded by a firm, partly calcified, plug just before the point where it breaks up into branches, and is much dilated at that point. The neighbouring portions of brain were softened and easily broken up into soft pultaceous matter.

From the same case as Preparation No. 3598.

Presented by the late Dr. MACKAY of Stony Stratford.

3736. Embolism of Cerebral Arteries: Softening of Brain.

52 *b.* The whole brain is shown. Firm coagulum occludes the left internal carotid artery at its termination, the commencement of the left anterior cerebral, and the left middle cerebral and its branches. Patches of the left frontal lobe, the internal portions of the ascending convolution of Broca, and the whole of the left temporo-sphenoidal and occipital lobes are softened and disintegrated. Some minute hæmorrhages were seen in the pia mater at the base of the brain in its recent state.

From the body of a woman aged 34, who died in the Hospital. She was admitted in an aphasic condition, with complete loss of power in the right arm and leg, and partial paralysis of the right cheek. No loss of sensation was apparent. It was stated that she had been found so an hour previously, lying over a grate that she had been cleaning; also that she had been out of health for some twelve months, suffering from cough, anorexia, and dyspeptic symptoms, and dyspnœa on exertion.

Death occurred thirty-four hours later, after several hours' severe dyspnœa. Slight power had been regained over the leg and speech, but no other change had taken place. (*St. George's Hospital Reports.* Vol. x, p. 50.)

The heart's walls were somewhat degenerated, and a thrombus was found in the left auricle. Embola were found in many situations besides those in the brain.

Post-Mortem and Case Book. 1879. No. 123.

3737. Hæmorrhage into the Anterior part of the Left Hemi-
17 *a.* sphere of the Brain.

No history.

3738. Hæmorrhage into the Left Optic Thalamus.
16 *a.* No history.

3739. Hæmorrhage into the Pons Varolii.
218 *a.* The central parts of the pons are broken down by coagulum of recent date. It extends into the medulla and into the fourth ventricle.

From the body of a woman aged 56, who was admitted into the Hospital in a moribund condition, with complete paralysis of all the limbs, and died in a few hours. She was said to have fallen down in a "fit" whilst out walking. The arteries of the base of the brain are shown as Preparation No. 3726. The kidneys were extremely granular.

Post-Mortem and Case Book. 1866. No. 167.

3740. Hæmorrhage into the Pons Varolii.
15 *a.* The central portion of the left half of the pons is seen to be torn up by recently extravasated blood. The seventh nerve is uninjured. The arteries are atheromatous.

From the body of a woman aged 40, who died in the Hospital, eight days after a "fit", which left her in a state of right hemiplegia, with partial paralysis of the tongue, and "thick" hesitating speech, but no affection of the face. For the last two days she was completely comatose, but the pupils were equal.

The kidneys were extremely granular.

Post-Mortem and Case Book. 1871. No. 20.

3741. Hæmorrhage into the Left Lobe of the Cerebellum.
204 *a.* The left lobe of the cerebellum is considerably larger than the right. It is hollowed out internally into a cavity the size of a hen's egg. In the recent state this cavity was full of blood-clot and broken down brain-matter. The clot was tolerably firm, of a granular appearance and reddish brown colour; but some parts of it were dark and evidently quite recent. The walls enclosing the coagulum were very soft. Microscopic examination of the contents showed them to consist chiefly of blood. Some of the blood-globules were normal in appearance, others shrivelled. They were mixed with much granular *débris.*

From the body of a lad aged 19, who was admitted into the Hospital, and died with tetanic symptoms in a few hours' time. No further history exists.

The kidneys were slightly granular.

Post-Mortem and Case Book. 1870. No. 32.

3742. Abscess after Injury.

28 *a.* A section of the anterior lobe of the left cerebral hemisphere is seen, showing the cavity of an abscess of elongated shape, on a level with the upper part of the corpus striatum. It stretches from the corpus striatum forwards, until it becomes almost superficial in the front of the brain. Inwardly it touches the corpus callosum. In the recent state it was full of fetid pus, and surrounded by a zone of yellow and softened brain-substance.

From the same case as No. 3481. The final symptoms of the case were pain in the head, and drowsiness gradually deepening into coma.

3743. Abscess of the Cerebellum, from Disease of the Ear.

27 *a.* The cerebellum is shown. The left lobe is laid open, showing a ragged abscess-cavity occupying the greater portion of the interior. In the recent case, the cavity was full of fetid pus. A collection of similar pus existed beneath the dura mater, covering the left petrous bone, which was white, but not softened. The left lateral sinus was occluded by firm pale fibrinous coagulum (see Preparation No. 3744). Fetid discharge flowed from the left ear and nostril. There was a ragged abscess in the left lung.

From the body of a man aged 21, who died in the Hospital, having suffered from otorrhœa for about seven months, from gradually increasing pain in the head, chiefly in the forehead, for about seven weeks, and in the later stages from drowsiness, gradually deepening into coma.

Post-Mortem and Case Book. 1870. No. 282.

3744 Portions of the Left Temporal and Occipital Bones,

27 *b.* from the same case as No. 3743, showing the lateral sinus occluded by firm clot.

3745. Abscess of the Cerebellum.

24 *a.* An abscess cavity, about the size of a walnut, is situated in the left lobe of the cerebellum, projecting on its inferior aspect. Its wall is formed inferiorly of a thin shell of brain matter, and the whole cavity is lined with a layer of

purulent lymph. In the recent state it contained thick greenish pus.

From the body of a man aged 34, who died in the Hospital. He had suffered from increasing pain in the occipital region, with severe nocturnal exacerbations, for ten weeks. He was troubled with giddiness in walking, was dull in manner, with some hesitation in speech, and gradually grew extremely weak. He died in a sudden fit of dyspnœa.

Post-Mortem and Case Book. 1866. No. 297.

3746. Carcinoma of the Left Cerebral Hemisphere.

45 *a*. The upper portion of the left hemisphere is shown, separated by a horizontal section, just above the level of the central ganglia. An encephaloid tumour of rounded form, about the size of a chestnut, is imbedded in its substance in the region of the supra-marginal convolution (*Ferrier*). It lies just beneath, and trenches considerably on, the grey matter of this convolution. The brain was otherwise healthy.

From the body of a man aged 48, who died in the Hospital with a scirrhous growth in one lung and encephaloid tumours in both kidneys. The symptoms referable to the brain comprised loss of power in the right limbs and the right side of the face, slight loss of sensation in the latter, and partial aphasia. The tongue could hardly be protruded beyond the lips. The pupils were equal. These symptoms were said to have commenced with a "fit".

Post-Mortem and Case Book. 1868. No. 213.

3747. Secondary Osteo-chondroma of the Brain.

242. The tumour only is shown. It is nearly spherical in shape, and measures an inch and a half in diameter. It was situated in the left hemisphere of the brain, just externally to the anterior portion of the lateral ventricle.

From the same case as No. 3499. The symptoms referable to the brain comprised right hemiplegia, aphasia, severe but ill-localised pain in the head, and, finally, drowsiness, with dilatation of the pupils. A full account of the case is given in *St. George's Hospital Reports*, vol. x, p. 663.

Microscopically, the cerebral tumour was found to consist mainly of cells, embedded in a nearly homogeneous matrix. Some of the cells were considered to be truly cartilaginous, but the majority were smaller and more angular, and resembled rather the type of osteoid cells. Similar gradations were found in the cells of the deposits

in the lungs and intestines; but in both these situations the intercellular substance was more abundant, occurring either in continuous tracts of homogeneous aspect, here and there pierced by lacunæ or solitary cells; or in the shape of trabeculæ of varying thickness, surrounding groups of cells derived, apparently, by proliferation of the solitary cells.

Post-Mortem and Case Book. 1878. No. 187.

3748. Glioma of the Pons Varolii and the Left Crus Cerebri.
238. A tumour of the size and shape of a pigeon's egg, but nodulated on the surface, is seen growing from the under aspect of the left half of the pons. The left crus cerebri is surrounded by a mass of similar growth, which has pushed upwards and expanded the left optic thalamus, and displaced the optic tract and corpus albicans of that side.

Microscopically, the growth consists of small round cells, closely packed in a scanty and slightly reticulated stroma.

From the body of a woman aged 40, who died in the Hospital. The symptoms had been pain in the head, frequent giddiness, and progressive loss of power in the right limbs, dating from five or six months before death; nearly complete loss of power, with partial loss of sensation in the same parts for about the last six weeks, starting from a fit of apoplectic character; confusion of mind, irritability, and thick, stuttering speech, during the last week. The pupils were natural, and no strabismus was observed; control over the bladder and rectum was retained. Death was sudden, and of the character of syncope.

Post-Mortem and Case Book. 1873. No. 386.

3749. Glioma of the Medulla Oblongata and Pons Varolii.
238 *a*. A globular tumour, developed in the upper part of the medulla, expands its bulbous portion to nearly double the ordinary size, and projects into the fourth ventricle, so as nearly to obliterate its cavity. It is visible externally only in one spot, between the lower portion of the medulla and the cerebellum, where it protrudes in the form of a thin wedge.

Microscopically, it was found to consist of small round cells, which in many parts showed a tendency to become elongated, and to form a coarse reticulum.

From the body of a girl aged 14, who died in the Hospital. The symptoms were: aching of the eyes after much use; slight ptosis of the right side; sluggishness

of the right external and the left internal recti; paralysis, with almost complete anæsthesia, of the soft palate; slight anæsthesia of the nose inside and out, especially of its left side, of the left cheek and forehead, and of both auriculo-temporal territories; slight paralysis of the facial muscles, especially the left; paralysis of the tongue and diaphragm; some degree of defect in power and sensation in the left hand, and slight loss of the latter, with comparatively low temperature, in all the left side. In addition, headache, giddiness, sleeplessness, cough, vomiting, scanty diaphoresis, and loss of flesh. The whole case was of a hundred and thirty-one days' duration, the onset being sudden, with a fall to the ground, followed by headache, giddiness, and dribbling of saliva, and by frequent vomiting for the first two months. The palate became affected in the tenth week, cough commenced in the eleventh, the patient lost flesh from the twelfth, and the fingers were weak and numb from the thirteenth. Death was due to apnœa. (*St. George's Hospital Reports.* Vol. ix, p. 52.)

Post-Mortem and Case Book. 1877. No. 225.

3750. Glioma of the Medulla Oblongata.

210 *a*. The medulla oblongata is the seat of a morbid growth, which materially alters its shape and aspect. The tumour is shown by the microscope to be of gliomatous character. The whole of the medulla is involved in it, except a small portion just below the pons. (See No. 3763.)

From the body of a man aged 33, who died in the Hospital. The symptoms were progressive paralysis, without marked loss of sensation, in the limbs and the thorax. The extensor muscles were more completely paralysed than the flexors. These symptoms appeared to be of nine months' date. They had been preceded by pain in the back of the neck for about a month, and by extensor paralysis of the wrists, assigned to lead poisoning, for nearly ten years. Death was due to apnœa.

Post-Mortem and Case Book. 1870. No. 1.

3751. Caseous Tumours of the Cerebellum and Pons Varolii.

37*a*. One, the size of a Tangerine orange, is situated on the upper surface of the left cerebellar lobe; a smaller mass occupies the inferior part of the pons. In the recent state the tumours were of caseous aspect. Microscopically, they showed highly refracting granular matter, with which oil globules, and a large proportion of small round granular cells, were mixed. The substance of the cerebrum and

cerebellum was much softened, the lateral ventricles greatly distended with clear fluid, and the meningeal vessels congested.

From the body of a girl aged 5½. Twenty-one months before death she became drowsy, and complained of "soreness of the neck". She vomited occasionally, and experienced difficulty in micturition. Four months from the onset the sight began to fail; a month later, the patient was quite blind. The head then became retracted, and speech embarrassed. Intelligence remained unimpaired. Convulsions followed, and coma, interrupted by lucid intervals, which ended fatally.

The child's head was large and broad, the sutures ununited. Its circumference was twenty-two inches on the level of the frontal eminence. One sister had died with glioma of the dura mater (see Preparation No. 3710), and several brothers and sisters had enlarged cervical glands; one had died of acute hydrocephalus, one of phthisis; and one was epileptic.

Presented by Dr. JOHN W. OGLE.

3752. Glioma of the Cerebellum and Pons Varolii.

236. A morbid growth replaces the greater part of the left half of the pons, the remainder of which is flattened by it. It extends into the left lobe of the cerebellum to within five-eighths of an inch of its posterior border, and replaces a great part of its substance. At the anterior inferior part of the growth is a nodule, which, in the fresh state, was infiltrated with extravasated blood. The fourth, fifth, sixth, and seventh nerves of the left side are involved in the mass.

Microscopically, the mass is seen to consist of a delicate reticulated stroma, in the meshes of which are glistening nucleated bodies of various shapes, rather larger than blood globules.

From the body of a boy aged 9, who died in the Hospital. The case was of seven months' duration. The symptoms were: weakness and languor, gradually deepening into stupor, and, finally, complete prostration; severe frontal and occipital headache, vomiting, and constipation; dilatation of the pupils, left internal strabismus, and slight left facial paralysis; deafness, intolerance of light, and, in a later stage, complete blindness. The retinal veins were early seen to be tortuous and dilated, and the margins of the optic disc obscured on both sides; double optic neuritis, most marked in the left eye, became clearly manifest, and ultimately the front of the left eye inflamed. Sensation

and smell were unimpaired, and no paralysis of the limbs appeared.

Post-Mortem and Case Book. 1870. No. 341.

3753. Secondary Lymphoma of the Brain.

106 *a.* The morbid growth is chiefly seen in the vicinity of the ventricles, the walls of which are swollen, soft, and villous. In the fresh state they were greyish-pink in colour, owing to numerous leashes of free-ending vessels. The fourth ventricle was increased in size by the softening of its walls. The other ventricles were full of opalescent fluid, but not much enlarged.

The growth, microscopically, was seen to consist of small round cells, in size between pus and lymph corpuscles. Of these there was a thick layer at the surface of the ependyma. The infiltration extended some distance into the tissue, becoming less and less dense, and ultimately merged into a simple hyperplasia of the neuroglia cells. (See No. 3754.)

3754. Dura Mater from the same case as No. 3753.

106 *b.* A tumour, of similar character to the morbid growth above described, is attached to the dura mater in the left occipital region. It was firmly adherent to the brain in that situation, and broke away with a ragged fracture, leaving a cavity the size of a Tangerine orange, as seen in Preparation No. 3753; from which a milky fluid exuded.

A preparation of the primary growth from the same case as Nos. 3753 and 3754 is shown in Series XVII (*v. infra*). The symptoms referable to the encephalic lesion were: occipital headache for thirty-six days before death, imbecility for about fourteen days, and external strabismus for three. Besides the last, no paralysis was noted.

Post-Mortem and Case Book. 1879. No. 180. *St. George's Hospital Reports.* Vol. x, p. 34. No. 740.

3755. Cyst of the Cerebellum.

42 *a.* The right hemisphere of the cerebellum is hollowed out by a cyst, which replaces nearly the whole of its mass. The cyst is lined by a smooth membrane. In the fresh state, it was filled with a clear limpid fluid, which afforded no trace of hydatids. Its wall is close to the under surface of the cerebellum; a somewhat greater thickness of brain matter surrounds it elsewhere.

From the body of a woman aged 30, who died in the Hospital. The symptoms were of twelve months' duration, and had commenced with giddiness and vomiting. When fully developed, they comprised also severe pain on

the top of the head; slight loss of power and of co-ordination, but none of sensation, in the right limbs; slight dilatation of the right pupil; and slow hesitating speech, with defective articulation of the labials, but no aphasia. Death was sudden, after a severe attack of vomiting.

Post-Mortem and Case Book. 1868. No. 197.

3756. Branching Cyst in the Brain. Abnormal Arterial System.
112 c. The lower portions of the brain are shown: sections made in various directions display a remarkable system of ramifying cavities, which contain a branched cyst, in the anterior part of the right hemisphere, and in the region of the left anterior perforated space. The cavities form chambers of various sizes, connected by winding passages. They are lined throughout by a smooth membrane, tolerably thick and rather tough. Numerous pillars, some very slender, project from their walls, and columns are found running in the thickness of the lining membrane. These are formed by arterial vessels, somewhat knotty, and irregular in their calibre, here and there greatly thickened, so as to be nearly or altogether impervious. This abnormal vascular system is derived from the left internal carotid, by a branch which arises on a level with the middle cerebral, and passes into the right frontal lobe. It is joined by a shorter branch from the right internal carotid, and, after following an abnormal course in the substance of the right frontal lobe, and supplying the branches described to the walls of the cavity, it divides into two terminal vessels, which appear to represent the anterior cerebral arteries of the normal brain. The layer of thickened tissue that forms the walls of the cavities is continuous, along the track of the abnormal vessels, with a similar layer found beneath the ependyma of the ventricles of the brain.

Within the above-mentioned cavities lies an extremely delicate cyst. In the passages it forms a fine tube; in the chambers it expands into larger or smaller sacs, from which finger-like pouches arise. The pouches are closely packed in the chambers. In the fresh state the cyst contained clear fluid, which gave no evidence of hydatids. The brain-substance was firm; the arachnoid cavity contained an undue amount of fluid.

From the body of a man aged 30, who died in the Hospital. The case was precisely two hundred and twelve days in length. The earliest symptoms were headache and vomiting, which continued severely for the first ten weeks, with obstinate constipation. There was occasional

numbness of the hands from the second month. From the twenty-seventh day the patient was liable to fits of mental derangement, closely resembling epileptic mania.

These attacks increased in frequency, and for five weeks before death mania was constant, alternating only, during the last fortnight, with a state of semi-coma. Death was preceded by slight convulsions. (*St. George's Hospital Reports.* Vol. ix, p. 152.)

Post-Mortem and Case Book. 1878. No. 250. *Path. Soc. Trans.* Vol. xxxi, p. 1.

3757. Hydatids of the Cerebellum.

49 a. Nearly the whole of the left lobe of the cerebellum is occupied by a hydatid cyst containing many small secondary cysts.

From the body of a man aged 25, who died in the Hospital. He had suffered from occipital pain of a severe character for nine months, from vomiting for about seven, and from double optic neuritis for at least two. During the last six weeks of life he was dull and stupid, but never unconscious. The sight was gradually completely lost. Paralysis of the right limbs, to a slight extent, was observed on the last day of life only. A singular attitude was assumed, during the last six weeks, by the patient, with a view of relieving the pain. He habitually sat up in bed with the trunk bowed forwards, and the head hanging down, to the right of the middle line, in front of the shoulder. Death was sudden, respiration ceasing before the stoppage of the heart.

Post-Mortem and Case Book. 1869. No. 208.

3758. Miliary Tubercle of the Brain.

239. Two slices of the cerebrum are shown, taken from the upper part of the hemispheres. A few yellow miliary tubercles are seen in the white matter. Similar tubercles were found in the left optic thalamus, and in the meninges at the base of the brain.

From the body of a girl aged 16, who died in the Hospital of general tuberculosis, after six weeks' illness.

Post-Mortem and Case Book. 1873. No. 302.

3759. Chronic Hydrocephalus: Tubercle.

The brain is shown. The lateral ventricles are enormously dilated; the septum lucidum is thinned, and, in one place, perforated.

The brain substance is moderately firm. A large tuberculous mass occupies the right optic thalamus;

smaller ones are situated at the posterior aspect of the cerebellum; in the centre of its left lobe; in the grey matter of the posterior portion of the right lobe of the cerebrum, between two convolutions; and in various other regions of the cerebrum. The arachnoid is generally thickened, and infiltrated with lymph at the base. Grey tubercles were found abundantly in the lungs, and one tuberculous mass in the right kidney. The lower cervical vertebræ were the seat of caries.

From the body of a boy aged 8, who died in the Hospital for Sick Children. His head had rapidly enlarged from the fourth month of life; and the fontanelles remained open till the fourth year. He had always been weak and ailing, and suffered frequently from headache and sickness. The last symptom was constant during the three weeks preceding admission, but ceased under treatment during the child's eight days of residence in Hospital. Pain in the back was present for six or seven weeks before death. The pupils were dilated (in the Hospital), but acted to light. Death was preceded by convulsions for several hours.

Hosp. for S. Children. Post-Mortem and Case Book. Vol. iii. No. 27.

3760. Hæmorrhage into the Spinal Arachnoid.

213 *a.* A thin layer of blood, which still preserves its red colour, is seen occupying the arachnoid cavity of the spinal cord in a considerable portion of its extent.

From the body of a man aged 36, who was admitted into the Hospital in a maniacal state and died within twenty-four hours. Hæmorrhage was found to have taken place into the arachnoid cavity of the brain, and some bloody fluid was contained in the ventricles. The blood in the spinal arachnoid appeared to have passed into it from the encephalon.

Post-Mortem and Case Book. 1868. No. 61.

3761. Hæmorrhage into the Spinal Cord.

534 *a.* A mass of extravasated blood, about the size of a hazelnut, is situated in the centre of the cord, opposite the fifth and the upper part of the sixth cervical nerve. The cord is softened around the blood, and to a slight extent throughout its length.

From the body of a man who fell twenty feet from a scaffold. He lived about a day and a half. The walls of the thorax and all the limbs were paralysed. Reflex action in the latter was not materially impaired. The

patient complained of pain in the head, became drowsy, and eventually comatose. Only the spine was examined *post-mortem*. No injury beyond that described above was found. A drawing of the condition is shown in Series XXI (*v. infra*).

Post-Mortem and Case Book. 1868. No. 84.

3762. Carcinoma of the Spinal Cord.

51 *a.* A nodule of encephaloid structure, the size of a hazel-nut, appears in the spinal cord, opposite the tenth dorsal vertebra.

No reference.

3763. Glioma of the Spinal Cord.

210 *b.* The upper seven inches of the spinal cord. An inch and a quarter's length from the commencement lies at the bottom of the jar. It is discoloured by immersion in chromic acid. For the first three inches and a half the cord is greatly enlarged. It contains a central cavity three-quarters of an inch in length, five-sixteenths of an inch from back to front, and half an inch laterally, which in the fresh state was filled with a creamy fluid and a mass of gelatinous consistence. The latter showed, under the microscope, small cells, for the most part round, embedded in an extremely delicate stroma. The theca was found to be thickened around the cervical region of the cord. A portion is left in the preparation.

From the same case as No. 3750.

3764. Cyst of the Spinal Cord.

137 *a.* Portions of the cervical and dorsal regions of the cord are shown. In the lower cervical and upper dorsal regions an oblong cyst is found, lying in the same axis as the central canal, and apparently taking the place of the grey commissure. The wall of the cyst is thick. Its contents were a limpid fluid. Its presence was not perceptible externally. The cord was softened throughout, especially in the neighbourhood of the cyst.

From the body of a woman aged 31, who died in the Hospital of enteric fever, about the tenth day of the attack, as far as could be judged *post-mortem*. The leading symptoms were loss of power in the legs, and attacks of "giddiness", of two years' date; frequent desire of micturition of six months' date. These symptoms were preceded by constant vomiting for six months; and accompanied for three months after their commencement by attacks of severe occipital headache. Hiccough after

food was present for three months at the beginning of the last year. The onset of the fatal fever was indefinite. Diarrhœa was present the last three days only. Death was preceded by dyspnœa and cyanosis.

Post-Mortem and Case Book. 1877. No. 305. *St. George's Hosp. Reports.* Vol. ix, pp. 4, 57, 431.

3765. Psammoma of the Spinal Cord.
234.

An oval nodulated tumour is seen in the spinal canal, apparently growing from the inner surface of the dura mater. It occupies the space between the sixth and seventh cervical nerves of the left side. It measures an inch and a quarter vertically, three-quarters of an inch transversely. The nerves above mentioned pass through its extremities, some of their fibres crossing in front or behind its mass. The spinal cord is displaced and seriously compressed, but not softened. There is no continuity of tissue between it and the tumour.

The tumour in the recent state was white. Microscopically, it was found to consist partly of a cellular structure—small oval cells, closely packed in a very delicate stroma, here and there permeated by nerve-fibres,—and partly of aggregations of round masses, formed of oval cells, or of oval cells mixed with calcareous matter, or of calcareous matter alone; each encysted by concentric fibroid rings.

Much clear fluid was found in the spinal canal. Some calcareous plates may be seen in the arachnoid.

From the body of a woman aged 34, who died in the Hospital. The leading symptom was of about a year's date; viz., paralysis of the lower extremities, accompanied by severe pain, that commenced in the feet and extended upwards to the thigh. The right side was affected a fortnight before the left. Loss of power was complete about two months after the onset. Hyperæsthesia, from the crests of the ilia downwards, was detected in the Hospital. Spasmodic movements of the legs constantly occurred. Slight loss of power in the hands and arms also appeared. Control over the bladder and rectum was retained till the last twelve days.

Post-Mortem and Case Book. 1872. No. 82. *Path. Soc. Trans.* Vol. xxiv, p. 15.

3766. Sciatic Nerve, Compressed by an Acupressure Needle: Tetanus.
111 a.

From the body of a man who died in the Hospital on the third day of an attack of tetanus, which had originated

five days after amputation in the lower third of the right thigh. The sciatic nerve had been compressed by an acupressure needle about half an inch from its cut end. It was constricted, flattened, and much bruised, and for some distance was unduly vascular, as also was its sheath.

Post-Mortem and Case Book. 1868. No. 4.

3767. Bulbous Nerves from a Stump.
165 *a.* Amputation in the leg had been performed three years previously. It was repeated at a higher level, in consequence of the knee having become the seat of chronic disease, and the stump painful.

Surgical Cases. 1877. No. 1144. *Amputation Book.* 1877. No. 20.

3768. Bulbous Nerves from a Stump: Partial Absorption of
168 *a.* the Head of the Humerus.

Removed from the dead body many years after amputation in the upper part of the arm. The bulbous condition is developed to an unusual degree, the bulbs having united to form a thick plate.

The articular surface of the head of the humerus (shown in the preparation) is partially absorbed.

Post-Mortem and Case Book. 1878. No. 62.

3769. Extremities of Nerves from a Case of Neuralgia of the
162 *a.* Stump.

From the same case as Nos. 3540, 3541, and 3542.

3770. Extremities of Nerves from a Case of Neuralgia of the
162 *b.* Stump.

From the same case as No. 3769. Removed at a subsequent operation.

IX.

DISEASES OF THE DIGESTIVE SYSTEM.

3771. Syphilitic Disease of the Fauces and Larynx.
21 *a.* A deep excavation is seen at the base of the tongue, lying towards the right side. The uvula, most of the left half of the soft palate, the glosso-epiglottidean folds, a portion of the right border of the epiglottis, and the right

ary-epiglottidean fold, are eaten away. The interior of the larynx, above the ventricular bands, is deeply eroded.

From the body of a man aged 33, who died in the Hospital. The affection of the fauces and larynx was of about two years' date, and had started some eight years after infection with syphilis. Gummata were found in the liver (*vide infra*).

Post-Mortem and Case Book. 1870. No. 125. *Path. Soc. Trans.* Vol. xxi, p. 218.

3772. 5 c. Epithelioma of the Tongue: Ligature of the Lingual Artery.

The right half of the tongue is infiltrated throughout with a morbid growth, which, under the microscope, presents the appearance of epithelioma, with numerous "nests". Much of the anterior two-thirds of the right half has been destroyed, and a ragged ulcerated surface is left, with thickened edges. The right hyo-glossus muscle is much wasted; apparently owing to the encroachment of the malignant growth on the subjacent connective tissue. The tissues forming the floor of the mouth were also infiltrated with the growth, and superficially ulcerated.

On the right lingual artery, just where it crosses the posterior border of the hyo-glossus, are seen the remains of a catgut ligature. The artery is nearly cut through; its proximal end is filled with firm clot for nearly a quarter of an inch; in the distal end no clot is found. The hypoglossal nerve is included in the ligature. Bristles have been placed in the right and left lingual arteries, and in the right superior thyroid.

From the body of a man aged 48, who died in the Hospital. The disease of the tongue was of between five and six months' standing. The patient had suffered much from local hæmorrhage, and was in a very emaciated condition. Ligature of the right lingual artery was performed by Mr. Holmes on Feb. 14, 1874. Death occurred from hæmorrhage on Feb. 23.

Post-mortem and Case Book. 1874. No. 58.

3773. 15 a. Impaction of a Sponge in the Œsophagus.

The œsophagus, trachea, and larynx, are shown. The sponge of a probang is fixed in the position in which it was found, twenty-four hours after death; viz., an inch and an eighth below the opening of the larynx. It causes the posterior wall of the trachea to bulge forward. On the bulging portion is seen an abrasion,

possibly caused by the tracheotomy tube used in the case.

The patient, a child aged 8 months, was admitted into the Hospital suffering from severe dyspnœa, which was said to have attacked it suddenly about eight hours before, while it was eating apples and beans. An "unqualified assistant", called in an hour later, had passed a probang, and had brought it out without the sponge.

The house-surgeon could feel a foreign body at the top of the larynx. He sent for the surgeon of the week; but had to open the trachea before his arrival. The surgeon, when he first saw the child, could also feel the foreign body; but shortly after, a severe fit of coughing came on, at the termination of which dyspnœa lessened, and the foreign body could no longer be felt with the finger. A gum catheter could be passed down the œsophagus into the stomach, and upwards from the tracheotomy wound through the glottis; but the tube could not be removed without producing dyspnœa.

The child remained, breathing quietly through the tube, till the sixth day, when intense dyspnœa returned, and loud mucous râles appeared in the chest. It sank, and died in the afternoon.

The lower lobe of the right lung was in part red-hepatized. Elsewhere the lungs were healthy.

Post-Mortem and Case Book. 1880. No. 311.

3774. Impaction of a Piece of Meat in the Pharynx.

16 *a.* A large piece of meat is impacted in the pharynx and upper part of the œsophagus, so as to occlude the aperture of the larynx.

This was the cause of death in a diabetic patient, who was eating voraciously. He died in a few minutes.

Post-Mortem and Case Book. 1876. No. 67.

3775. Communication between the Œsophagus and Trachea.

29 *b.* An opening of oval form, an inch and three-eighths by seven-eighths of an inch in size, places the œsophagus in communication with the trachea. The upper border of the opening is an inch below the cricoid cartilage, its lower border an inch above the bifurcation of the bronchi. Its edges are thickened and rounded, and no trace of recent ulceration is visible.

From the body of a woman aged 22, who died after eighteen months' symptoms; the earliest of which was pain after food, referred to the lower part of the sternum. Symptoms of "bronchitis" followed, with acute pain in

the interscapular region. In the fifth week, or thereabouts, cold chills appeared, and difficulty and pain in swallowing fluids. The last symptom persisted for a fortnight, and recurred, with intervals of relief. Solids, as well as fluids, caused discomfort after the first recurrence. About the eighth month the patient began to expectorate purulent fluid, and the difficulty was somewhat lessened. She was in the Hospital from the thirteenth to the seventeenth month. A fulness was noticed in the right subclavian triangle. Percussion was dull over the apex of the right lung, and the right bronchus appeared to be pressed upon. Abscess in connection with the œsophagus was diagnosed, but nothing more definite was made out. The patient died eventually at her own home.

Medical Cases. 1869. No. 1505.

3776. Epithelioma of the Upper End of the Œsophagus.

30 *a.* For two inches downwards from the level of the cricoid cartilage, the whole circumference of the wall of the œsophagus is the seat of an epitheliomatous growth. Ragged outgrowths project into the tube, and deep excavations penetrate the wall. In one spot the wall is perforated, and the œsophagus opens into the areolar planes of the left side of the neck, which, in the recent state, were infiltrated with pus. The trachea is narrowed by the pushing forward of its posterior wall.

From the body of a man aged 60, who died in the Hospital. The symptoms of obstruction were of about six months' date, and for half that period no solid food had been swallowed.

Post-Mortem and Case Book. 1872. No. 302.

3777. Carcinoma extending to the Œsophagus.

29 *a.* The larynx and trachea are shown, with the corresponding length of the œsophagus, and some of the neighbouring lymphatic glands. The glands are greatly enlarged by infiltration with encephaloid material. A mass of similar material separates the œsophagus from the trachea. It has infiltrated the posterior wall of the latter, and projects into its tube as an elongated flat tumour for about two inches, commencing an inch and a half below the cords. In two places the tracheal tumour is pierced by large holes, leading into the interior of the mass.

The anterior wall of the œsophagus is extensively ulcerated. For two inches downwards from a level an

inch and a half below the opening of the larynx, it is altogether wanting, and a series of irregular chinks and caverns are exposed, excavating the encephaloid mass, and communicating with the holes that open into the trachea. To the naked eye the remaining œsophageal wall appears natural; but, in the recent state, broad stripes of carcinomatous growth could be seen in it, following the course of the longitudinal fibres.

The carcinomatous nature of the growths was established by the microscope. The bronchial and lumbar glands were infiltrated with similar material, and a nodule, the size of a walnut, was found in the spleen.

From the body of a woman aged 35, who died in the Hospital. A glandular tumour had been observed above the left clavicle for nearly a year and a half; and at one time it had suppurated and burst. She had suffered from cough and emaciation for about a year, and from dysphagia and violent attacks of dpspnœa for nearly as long. Blood had been coughed up about seven months before death.

No operation was performed.

Post-Mortem and Case Book. 1869. No. 324.

3778. Carcinoma of the Cardiac End of the Œsophagus.

33 *a*. The œsophageal wall, in its lowest three inches, is the seat of an encephaloid tumour. The tumour grows from the internal aspect of about three-fourths of the circle of the wall, and forms a cylinder (split open in the preparation) about an inch and a half in diameter. It would appear to have completely blocked the calibre of the tube. Nodulated outgrowths project upwards, and others downwards into the cavity of the stomach. The former are slightly ulcerated.

Four similar tumours of small size were found in the liver, and some nodules in the great omentum. Microscopically, all presented a fibrous matrix, containing accumulations of epithelioid cells, arranged in tubes, and sometimes ending in bulbs.

From the body of a man aged 51, who died in the Hospital. The symptoms of œsophageal obstruction had been present for nine months. No solid food could be taken during the last three weeks. Pain in the epigastrium was experienced during the last four months. Ten weeks before death, a bougie was passed. No stricture was detected, but pain was produced, and some hæmorrhage took place. The bougie was passed daily for the next fortnight, with slight temporary relief.

Post-Mortem and Case Book. 1878. No. 298.

3779. Epithelioma of the Lower End of the Œsophagus.

27 b. Seven inches and a half of the œsophagus are shown, and a small portion of the stomach, split open from the back. The last five inches and a half of the œsophagus exhibit continuous ragged ulceration of the whole circuit of its walls, destroying their whole thickness in places. The disease has stopped short at the lower end of the œsophagus, and does not extend into the stomach.

The right wall is altogether wanting in the lowest three inches. Against the opening thus made, the right lung, in the complete state of the parts, was found to be in a gangrenous condition for the depth of an inch. *Débris* from the pulmonary tissues filled the hollows of the œsophageal ulcers. The stomach was dilated and filled with recent blood.

From the body of a patient aged 60, who died in the Hospital. The case was of nine months' duration. It was characterised throughout by dysphagia of variable severity and somewhat sudden onset, and by severe attacks of palpitation (the heart was fatty); after the second month, by pain in the epigastrium, præcordia, and opposite region, with severe shooting paroxysms. The patient was under observation thirty-four days. After the fourth, he was able to eat fish without discomfort; but, on the eighteenth, dysphagia returned, and was referred to the pomum Adami. From the larynx to the epigastrium pain was felt. Obstruction increased further about the twenty-ninth day.

On the thirty-third, the pectoral pain had settled in the right side and become severe. Cough became troublesome. During the night hæmoptysis set in, about a pint and a half of bright red blood was coughed up, and the patient sank.

Post-Mortem and Case Book. 1880. No. 79.

3780. Dilatation of the Stomach.

207 a. The stomach is enormously dilated, but not otherwise diseased. The greater curvature measures rather more than three feet. The pylorus, in the body, was found in the left iliac region. No sarcinæ could be discovered in the contents of the viscus.

From the body of a woman aged 25, who died in the Hospital. She had suffered from periodical vomiting, with constipation and amenorrhœa, for fourteen months. Occasionally, small quantities of blood had been brought up. Total suppression of urine obtained for nearly forty-eight

hours before death, and the fatal end was ushered in by repeated convulsive fits.

Post-Mortem and Case Book. 1870. No. 359.

3781. Perforating Ulcer of the Stomach: Erosion of the Splenic
213 *a.* Artery.

To render this preparation intelligible, it is necessary to premise that the stomach was found of an hour-glass shape, constricted to a calibre of about an inch and a half in the middle; and that a line of tough adhesions, running to the right of the linea alba, united the anterior wall of the abdomen to parts of the stomach, liver, and omentum magnum.

The preparation consists of a portion of the middle part of the stomach, with portions of the pancreas, and of the abdominal wall, adherent to it.

In front is displayed the mucous surface of the viscus, interrupted by an opening the size of a half-crown, at what was the inferior aspect of the constricted part. The opening is floored, at a depth of a quarter of an inch, by condensed areolar tissue covering the pancreas, and is limited by tough adhesions connecting its edges with that organ.

In the floor is seen a small ragged opening. A twisted wire protruding from it exhibits its connection with an artery, the cut end of which is seen at the back of the preparation. The artery is the splenic, and the aperture has been formed in the side of its tube. The vessel is permeable in both directions.

From the body of a woman aged 61, who died in the Hospital, after three days, of hæmatemesis. Symptoms referable to ulceration of the stomach had been present since the age of 16. An abscess had formed near the umbilicus thirty-six days before death, had opened twelve days later, and continued to discharge for nearly a week.

Post-Mortem and Case Book. 1880. No. 103.

3782. Perforating Ulcer of the Stomach: Abscess of the Epi-
292 *a.* gastrium and Liver.

The liver; and portions of the stomach, the diaphragm, and the skin of the epigastrium; are shown. In the anterior wall of the stomach, near the lesser curvature, are two small perforating ulcers. They lead into an abscess cavity; in part formed between the layers of the peritoneum of the epigastric region, and limited by firm adhesions; in part excavated in the left lobe of the liver. The abscess points through the skin of the epigastrium (the protrusion has been opened in preparation). It has

perforated the diaphragm near its left border, but firm adhesions of the pleura have prevented further extension.

From the body of a woman aged 61, who died in the Hospital. She had noticed a "fulness" in the epigastrium for about two years; but the earliest definite symptom was a spasmodic cough, which commenced thirty-two weeks before death. After lasting thirty days, it ceased suddenly, with an attack of severe epigastric pain and vomiting, of an hour's duration. Thenceforth, dull pain in the epigastrium was constantly present; and vomiting occasionally. A second severe attack of pain and vomiting occurred in the fifth month. The patient was in Hospital nine weeks and a half. A hard mass, steadily enlarging, was to be felt in the epigastrium, which was the seat of increasing pain on pressure. The pointing of the abscess, as described above, was observed for the first time nine days before the patient's death, which was produced by obstinate vomiting and gradual exhaustion. The vomita contained bile in the last stages, but no pus was noticed.

Post-Mortem and Case Book. 1878. No. 196.

3783. Effects of Hydrochloric Acid on the Stomach.

200 *a*. The inner coat is represented by shreds and thick rugæ (much has separated in preparation) of a tough, brownish-black material, resembling decayed India-rubber, which hangs on the stiffened, coriaceous, and eroded middle coat. In places, the latter has been eaten completely through. All but one of the perforations are closed by a layer of lymph that coats the serous surface of the viscus.

The œsophagus, shown also in the preparation, is thick, stiff, and leathery, and blackened in patches on the inner surface.

From the body of a man aged 26, who died in the Hospital seventy-five hours after swallowing six ounces of hydrochloric acid. Pain, and vomiting of blood-stained matters, immediately followed ingestion, and continued at intervals for about twenty hours. Matters free from blood were occasionally brought up till about eight hours before death, when profuse hæmatemesis took place. Pain continued about the waist. The bowels were constipated.

Post-mortem, the mouth and fauces presented a normal appearance. On the patient's admission they had been lined by parchment-like patches. The peritoneum was coated with soft lymph throughout, and contained fæcal matter; the duodenum was slightly blackened on its interior, the intestines otherwise healthy.

Post-Mortem and Case Book. 1877. No. 356.

3784. Late Effects of Nitric Acid on the Stomach.

206 a. The stomach is very small, measuring but four inches and a half in length and seven inches in circumference. The mucous membrane presents a series of thickened longitudinal bands, which extend, with some degree of regularity, from the cardiac orifice to the pylorus. They are connected by transverse rugæ. In the recent state they were of a slate-blue colour. A cicatrix, about one inch by one and a half, is seen just below the cardiac orifice. The pylorus, for the distance of an inch, is contracted by cicatricial tissue, so as to admit only the fine glass rod, the size of a bristle, which is seen in the preparation.

A few slightly-raised patches are seen in the œsophagus. The tongue and larynx are natural, as were the intestines and peritoneum.

From the body of a man aged 40, who died in the Hospital fifty-four days after swallowing half an ounce of nitric acid. The symptoms commenced about an hour after, with vomiting of grumous matter, which continued some twenty-four hours, mucus being ejected for another day. Pain and tenderness in the epigastrium accompanied the vomiting. There was much soreness about the throat and larynx for a fortnight or more, and the voice was hoarse. The mucous membrane of the mouth and tongue was whitened, and peeled off. The upper parts of the larynx were seen to be similarly affected. No marks, however, were visible on the lips externally. Profuse hæmatemesis occurred on the ninth and fifteenth days. On the forty-first, the patient was discharged, apparently well, though still weak and pale, with a certain degree of hoarseness persisting.

On the forty-third, hæmatemesis took place for the third time. Thenceforward, he was troubled with seizures of crampy pain in the epigastrium about every hour, followed by eructations, and those by vomiting, frequently of grumous matter. He perceived, he said, that his food went into his stomach for a certain distance, but was unable to proceed further. He was readmitted on the forty-seventh day, and, the symptoms continuing unrelieved, died on the fifty-fifth. (*St. George's Hospital Reports.* Vol. ix, p. 18.)

Post-Mortem and Case Book. 1877. No. 166.

3785. Effects of Crude Carbolic Acid on the Stomach and Duodenum.

206 b. The walls of the viscera are tough and leathery, and the rugæ of the duodenum swelled. The mucous sur-

face is of a brownish-grey colour, and is patchily coated with a material resembling thin pipe-clay.

No reference.

3786. Effects of Corrosive Sublimate on the Stomach, Œsophagus, and Duodenum.
37 a.

The epithelial coating of the œsophagus forms a layer which can be peeled with ease from the subjacent tissue. Its dirty-white colour was, in the fresh state, sharply contrasted with the deep red hue which characterised the subjacent layers of the mucous membrane from the lips downwards. The interior of the stomach, near the orifices, presents, and presented in the fresh state, the same appearances as the œsophagus. The rest of the gastric wall shows thick rugæ, coated with a blackish deposit of altered blood, that resembles dried mud. When recent, the wall was found to be sodden, deeply congested in patches externally, and infiltrated with blood.

The rugæ of the duodenum are thickened and leathery. In the fresh state, the mucous membrane was greyish-white, and coated with grey slime. From the middle of the jejunum onwards, interstitial hæmorrhages were found, and blood had been exuded into the canal. From the lower half of the ileum the appearances were those of severe catarrh. Ecchymoses appeared in the mesentery.

From the body of a man aged 53, who was admitted into the Hospital in a moribund state, and died two hours afterwards. The nature of the poison was proved by chemical analysis of the contents of the stomach.

Post-Mortem and Case Book. 1878. No. 368.

3787. Carcinoma of the Cardiac Orifice of the Stomach.
222 b.

A ragged ulcer, circular in shape, about two inches and a half in diameter, with raised edges, is situated at the cardiac orifice of the stomach; about two-thirds of its area being within that viscus, the remaining third in the œsophagus.

From the body of a man aged 50, who died in the Hospital with multiple carcinomatous growths. No obstruction to the passage of food had been experienced.

Post-Mortem and Case Book. 1880. No. 161.

3788. Carcinoma of the Stomach: Perforation of the Abdominal Wall.
222 a.

The wall of the abdomen, in the umbilical region, is shown, with the subjacent structures, portions of the stomach and liver, and the pancreas. The pyloric region

of the anterior wall of the stomach is the seat of carcinomatous growth, in the shape of irregular soft nodules, in places ulcerated. The carcinomatous area forms an irregular circle, about five inches in diameter. The gastric wall, or, more strictly speaking, the morbid growth which replaces it, is firmly adherent to the abdominal wall around and below the umbilicus; and two sinuses, one large enough to admit a forefinger, lead through the adhesions from the exterior into the cavity of the stomach.

From the body of a woman aged 43, who died in the Hospital. An abscess had formed about the umbilicus six or seven months before her death. It was opened, in the Hospital, fifteen weeks before death, and continued to discharge pus. After some thirteen weeks, undigested food began to pass out by the wound, and, twelve days later, the patient died.

Post-Mortem and Case Book. 1865. No. 335.

3789. Embolism in the Omentum.

249 *a.* A soft blood-tumour, the size of a walnut, is seen in the thickness of the omentum magnum. A large arterial branch, close at hand, is seen to be occluded by coagulum. Small ecchymoses, associated with blocked arteries, occurred throughout the length of the small intestine, and one such, larger than the rest, is preserved in the preparation.

From the same case as No. 3736.

3790. Carcinoma of the Mesentery.

171 *a.* A coil of small intestine is seen, with its mesentery attached. The layers of the latter are separated, and the serous layer of the bowel raised, by flattened nodules of encephaloid carcinoma. The nodules are partly imbedded in the muscular coat, but do not materially raise the surface of the mucous membrane.

From the body of a woman aged 45, who died in the Hospital of carcinoma of the omentum. The remaining portions of peritoneum, where in contact with the morbid mass, were studded with carcinoma, as seen in the specimen. The symptoms were of not more than three months' date.

Post-Mortem and Case Book. 1868. No. 351.

3791. Pouch connected with the Jejunum.

194 *a.* The pouch opens from the jejunum, in its third or fourth inch, by an aperture large enough to admit a finger, the margins of which are thickened. It arises from the

attached side of the gut, and lies between the layers of the mesentery. It is of the size of a hen's egg. Its wall is much thinner than that of the intestine, and contains but little muscular tissue. Its inner surface is tolerably smooth, and is lined by a prolongation of the intestinal mucous membrane.

From the body of a man aged 61, who died in the Hospital of free hæmorrhage into the jejunum, ileum, and large intestine. All the vessels leading to the pouch were carefully injected with water, but it was not thereby shown that the source of hæmorrhage lay in it.

Post-Mortem and Case Book. 1868. No. 300.

3792. Artificial Anus, sixty-one days after Colotomy.
103 *d.* The operation was performed in the left loin by Mr. H. Lee, on February 26, 1871, for the relief of obstruction caused by carcinoma of the rectum. The affected portion of the rectum is shown in the preparation.

The patient, a man aged 37, died on April 28.

Post-Mortem and Case Book. 1871. No. 85.

3793. Artificial Anus, sixteen months after Colotomy.
103 *b.* From the same case as No. 3809.

3794. Artificial Anus, twenty-two months after Colotomy.
103 *c.* The operation was performed on a man aged 49 by Mr. Pollock, on September 11, 1867, for scirrhous stricture of the rectum. The diseased portion is shown in the preparation. The patient lived and performed official duties till July 17, 1869, when he died of fatty heart.

No fæces had passed through the rectum for twenty days before the operation; but, a few weeks after, some small particles began to escape. The amount increased, and defecation was partly performed *per anum* till the patient's death, though most of the fæces were ejected by the lumbar opening. The latter caused some difficulty by the tendency it evinced to contract.

To the strictured portion of rectum, a part of the small intestine was found adherent after death. No other sign of former peritonitis was discernible.

A portion of colon is shown in the preparation. A conical pouch, as large as a florin at the base, tipped by a round aperture the size of a threepenny piece, forms the artificial anus. The surrounding tissues have been removed.

Presented by Mr. Pollock.

3795. Strangulation of the Small Intestine by Adherent Ap-
153 c. pendices Epiploicæ.

A portion of the small intestine is constricted by a ring formed by the adhesion of two of the appendices epiploicæ of the colon.

From the body of a man who died in the Hospital of the obstruction thus caused.

No reference.

3796. Strangulation of the Small Intestine by Adherent Ap-
153 a. pendices Epiploicæ.

The ileum, about two inches above the valve, is constricted by a fibrous loop derived from the sigmoid flexure. The mesentery is included in the loop. The tissue of the loop is loaded with fat, and it would seem to have been formed from two adherent appendices epiploicæ. The other appendices of the colon are unusually long, and some are perforated at the base, as though formed from two adherent processes.

The loop has deeply indented the walls of the intestine which it constricts, but is not adherent to them.

From the body of a man aged 68, who died in the Hospital. The strangulation occurred suddenly, during the act of lifting, twelve days before death. Obstruction was total. The patient had been for twenty years the subject of double inguinal hernia.

Post-Mortem and Case Book. 1861. No. 73.

3797. Strangulation of the Transverse Colon by Adherent Ap-
153 e. pendices Epiploicæ.

The transverse colon is shown; and part of the ascending colon; cut open, except at the point of constriction. The appendices are unusually loaded with fat; and a bunch of them, near the splenic flexure, having become adherent, constrict the bowel so that its canal barely admits the thumb. The gut, above the stricture, is greatly distended. Three gangrenous patches are seen, each about the size of a shilling. One of these has given way. The resulting perforation, in the fresh state, was a mere pin-hole.

From the body of a woman aged 68, who died in the Hospital. She had suffered from constipation for three years, and from pain in defecation for twelve months. An attack of intestinal hæmorrhage had occurred three months before death. On admission, the bowels had not acted for a week. The abdomen was not distended, and

there was no actual vomiting. Ten days later a free healthy evacuation was induced by a turpentine enema; but acute pain in the abdomen immediately signalled the occurrence of perforation, and the patient died, in five hours, of the consequent peritonitis.

The ascending colon was found greatly distended with semi-fluid fæces, which oozed out of the perforation described above.

Post-Mortem and Case Book. 1878. No. 7.

3798. Strangulation of the Descending Colon by Adherent Ap-
103 *e.* pendices Epiploicæ: Double Colotomy.

Two or three adherent appendices form a fibrous ring around the descending colon, a little below the splenic flexure. Complete stricture is thus caused, and ulceration of the mucous membrane has commenced along the line of the ring.

From the body of a patient aged 56, who died in the Hospital. She had suffered from constipation and vomiting for a year and a half; from the same symptoms in an exaggerated form, with constant pain, for six weeks before admission.

After four days' complete obstruction, colotomy was performed in the left loin; but the stricture, as felt by the finger, was an inch and a half above the wound. The operation was repeated on the right side. A small quantity of fæces escaped; but the patient never rallied, and died six days later.

The greater part of the colon, including the seats of operation, is shown in the preparation.

Post-Mortem and Case Book. 1877. No. 167.

3799. Strangulation of the Ileum by a Band of Adhesion.
153 *b.* A little way above the valve the ileum has made a figure-of-eight twist on itself. The junction of the curves is tightly encircled by a fibroid band that passes from one portion of the twisted gut to another. The portion of intestinal wall embraced by the middle of the loop is the seat of a dense cicatrix, which so diminishes its calibre that water can hardly be made to pass.

From the body of a man aged 35, who died in the Hospital of obstruction of the bowels of four days' date. He had suffered several times from similar symptoms in the four years previous. Numerous firm peritoneal adhesions were found after death.

Post-Mortem and Case Book. 1866. No. 329.

3800. Intussusception (Carcinoma).

162 *a*. About three inches of the ileum are intussuscepted. The walls of the intestine are thickened by infiltration with carcinoma. The seat of the intussusception is about three feet above the ileo-cæcal valve.

From the same case as No. 3694.

3801. Intussusception (Polypus).

177 *c*. About four inches and a half of the ileum, to which a large polypoid growth is attached, have become intussuscepted about a foot above the ileo-cæcal valve. The intussuscepted portion is in a semi-gangrenous state. Some firm adhesions have formed between the layers of peritoneum at the point of invagination.

From the same case as Nos. 3803 and 3822.

The lesion shown was the cause of death, which occurred after sixteen days, in consequence of gangrene and perforation of the bowel.

Pathological Society's Transactions. Vol. xxi, p. 188.

3802. Intussusception.

361. A roughly cylindrical mass, about four inches in length, removed from the rectum during life, and supposed to be a portion of invaginated intestine. Its surface is covered with mucous membrane, except in one part, where a piece of the mucous covering has sloughed and exposed muscular fibre and connective tissue. At the apex of the tumour is a depression, resembling the os uteri. A bougie passed up this depression comes out at the sloughing part of the surface. The tumour has been laid open so as to show its interior, but the tissues are so matted together and altered that no distinct evidence of the presence of the three coats of the intestine can be obtained.

From the body of a man, who was admitted into the Hospital with the following history: That, two years and a half before, he was kicked on the perinæum, and had since suffered from pain and difficulty in micturition, and had been subject to attacks of retention of urine. Seven days before admission, whilst straining to pass water, a portion of bowel had protruded from the rectum. He returned it with the finger, but lost a considerable amount of blood. When admitted, he was evidently very ill, and complained of retention of urine. Upon examination of the rectum, the mass could be felt. He continued in a very low state for about three weeks, when the mass again came down. It was found to have a very narrow pedicle, which was tied, and the tumour removed. He died thirteen days

after of pyæmia. The large intestines were adherent in two places to the abdominal wall, viz., in the right iliac fossa, and at the splenic flexure of the colon. In the iliac fossa, the cæcum and its vermiform appendix had disappeared, and the posterior wall of the colon was ulcerated through, so that the canal in this situation was formed partly of gut and partly of the abdominal parietes. The same thing had taken place at the splenic flexure. In the ileum, near the situation of the ileo-cæcal valve, was the tumour shown as Preparation No. 3821. Midway between the splenic flexure of the colon and the rectum, was a patch of ulceration, which almost completely encircled the gut, and above this a smaller circular patch.

Post-Mortem and Case Book. 1867. No. 287. *Path. Soc. Trans.* Vol. xix, p. 207.

3803. Transverse Cicatrix in the Wall of the Ileum, probably the
177 *b.* result of Intussusception.

The portion of intestine shown is constricted at one point (about four feet and a half above the ileo-cæcal valve) by a thick transverse linear cicatrix. Below the cicatrix the bowel is dilated into a pouch. Two inches and a half below is a small polypus.

From the same case as Nos. 3801 and 3822.

Nine years before death the patient had suffered from an attack of severe pain in the right iliac region, with constipation and persistent vomiting; which lasted a week. A proneness to constipation was observable during subsequent life. It was surmised that the above symptoms had signified an intussusception, of which the cicatrix described was the result; but no slough had ever been observed to pass by the rectum.

Pathological Society's Transactions. Vol. xxi, p. 190.

3804. Perforating Ulcer of the Duodenum.
365. In the anterior wall of the duodenum, just beyond the pylorus, is a round, clean-cut perforation, of the calibre of a quill. The mucous and muscular coats of the gut are destroyed to a slightly greater extent than the peritoneal layer. The wall of the bowel is thickened, but not to a great extent, around the perforation.

From the body of a painter aged 56, the subject of granular disease of the kidneys, who died in the Hospital of the peritonitis resulting from the perforation, for which he was admitted. The origin is not apparent.

Post-Mortem and Case Book. 1871. No. 34.

3805. Perforating Ulcer of the Cæcum.

366. About an inch and a half below the ileo-cæcal valve a puckered cicatrix appears in the intestinal wall. It is pierced by two round orifices, each of the calibre of a quill. The mucous membrane around is much plicated; it partially closed the orifices in the recent state. On the external surface are seen traces of a large abscess, occupying the right lumbar and iliac regions and extending into Scarpa's triangle, into which the perforations opened.

From the body of a woman aged 20, who died in the Hospital. The symptoms, pointing to inflammatory disease in the right iliac region, had commenced suddenly forty-seven days before death. The origin of the perforation does not appear.

Post-Mortem and Case Book. 1871. No. 54.

3806. Perforating Ulcer of the Sigmoid Flexure.

334 *a.* The ulcer is situated close to the attachment of the meso-colon. It is of oval form, and measures five-eighths of an inch by three-eighths. Its edges are rounded, but not greatly thickened. The mucous membrane is destroyed to a much greater extent than the serous coat. On the external surface, around the ulcer, the marks of an abscess are seen.

From the body of a man aged 50, who died in the Hospital. Symptoms of abscess in the left iliac region had been present for thirty-nine days; of abscess in the prostate gland for twenty-nine; of pyæmia for nine. Scrofulous abscesses had existed in several regions for an undefined period.

Post-Mortem and Case Book. 1866. No. 355. *Path. Soc. Trans.* Vol. xviii, p. 104.

3807. Perforating Ulcer of the Appendix Cæci, from a Fæcal

357 *a.* Concretion.

The appendix is glued to the cæcum by soft lymph. Half an inch from its extremity, a perforating ulcer exposes an oval mass, the size of a cherry-stone. The appendix being slit open, a second similar body is seen just above. Both, on examination, appear to be of fæcal origin.

From the body of a boy aged 17, who died in the Hospital of the peritonitis resulting from the perforation, before the onset of which the bowels had not acted for a week.

Post-Mortem and Case Book. 1864. No. 39.

3808. Perforating Ulcer of the Appendix Cæci.

357 *b.* The appendix has been laid open from end to end. On its mucous surface may be seen several minute circular ulcers, one of which has perforated the wall. The aperture barely admits the head of a probe. A fine glass rod is passed through it.

From the body of a tailor aged 29, who died in the Hospital of the resulting peritonitis, complicated by delirium tremens. No concretion or foreign body was found in the appendix, and the cause of the perforation was not apparent.

Post-Mortem and Case Book. 1866. No. 37.

3809. Vesico-Intestinal Fistula.

121 *a.* The bladder is shown, laid open along its anterior wall; a portion of the cæcum, and a portion of the sigmoid flexure, also laid open. Both portions of intestine are adherent to adjacent areas of the wall of the bladder; and a channel passing through either mass of adhesions, places the bladder in communication with the bowel. The channel that opens into the cæcum, through which a glass rod is passed, is about a quarter of an inch in diameter, and its intestinal aperture is smooth and rounded. That leading into the colon is ragged and wide. Both enter the bladder close together in the midst of ragged ulceration. The rest of the vesical lining is smooth, and apparently healthy. A small ulcer, not perforating, was found in the ileum, a few inches above the valve. The masses of adhesion appear, under the microscope, to be purely inflammatory formations. They show no trace of carcinomatous structure.

From the body of a man aged 52, a patient under Mr. Holmes. When he first came under observation, symptoms of obstruction of the bowel had existed for more than four years, those of ulceration into the bladder for three months. Large quantities of fæces were being passed by the urethra, and most of the urine by the rectum. The latter fact, the character of the fæces, and other more general considerations, pointed to the lower part of the large intestine as the seat of the perforation. Mr. Holmes accordingly performed colotomy on June 17, 1865. From the succeeding day, the fæces passed, with few exceptions, and after a month or so, entirely, by the artificial anus in the left loin. An "*éperon*" formed, which covered the mouth of the lower part of the bowel, and guided the fæces externally. Some urine continued to pass at the anus till February 1866, and at rare intervals subsequently. The general health greatly improved;

but pain, referred to the region of the pelvis, was occasionally present.

During the summer of 1866, the pains became more severe, and the health again began to fail. In September, fæces reappeared in the urine, and, three or four weeks later, ceased to pass by the lumbar wound. Urine commenced to flow freely by the anus. The patient's sufferings increased, and he died on October 26th.

It would appear that the opening in the sigmoid flexure was the one formed in 1865, and that the ulcer in the cæcum did not perforate into the bladder till September 1866. The artificial anus is shown as Preparation No. 3793.

Medico-Chir. Trans. Vol. xlix, p. 65, vol. l, p. 15.

Presented by Mr. HOLMES.

3810. Albuminuric Ulceration of the Colon.

148 *a*. The lower end of the descending colon is shown. The mucous membrane is thickened, and perforated by a number of minute ulcers. The edges of the ulcers are thin and undermined. Some appear to have partially cicatrised at the base.

From the body of a man aged 50, who died in the Hospital. He was admitted four days before death, delirious, with cough, expectoration, and profuse diarrhœa, which continued till the end. The presence of well-marked "rose-spots" led to the diagnosis of enteric fever.

The kidneys were coarsely granular, with thick adherent capsules and wasted cortex; the left ventricle of the heart greatly hypertrophied.

Post-Mortem and Case Book. 1880. No. 153.

3811. Albuminuric Ulceration of the Small Intestine.

139 *c*. The greater part of the jejunum, the ileum, and the cæcum, are shown. The mucous membrane is generally thickened. From the middle of the jejunum to the middle of the ileum ulcers of irregular shape and size occur in close succession. They present no sloughs, and some have cicatrised. The edges are not markedly raised. A white filmy layer coats the mucous membrane in their neighbourhood. It appears to have glued down, and, in places, obliterated the valvulæ conniventes. The tips of these valves appear to have undergone ulceration first of all; the agminate glands are not specially affected. In the fresh state, transmitted light showed blocked vessels and elongated hæmorrhages in connection with the ulcers.

Several of the ulcers have perforated all the coats of the bowel. Their edges are clean cut.

The cæcum is not ulcerated; but, in the fresh state, some elongated yellowish, probably fibrinous, lumps, placed transversely to the axis of the bowel, were detected in the submucous tissue.

From the body of a man aged 29, who died in the Hospital, in consequence of the perforation of the intestines. The symptoms had been those of chronic renal disease; and the kidneys, after death, were found to be smaller than normal, and granular at the surface, with closely adherent capsules. The cortex was very pale, almost white, and spotted with minute globular hæmorrhages. Similar hæmorrhages occurred in the pancreas. The left ventricle of the heart was hypertrophied.

Pain in the abdomen was present for forty days before death. No diarrhœa occurred, but the bowels were kept freely open by purgatives.

Post-Mortem and Case Book. 1879. No. 299.

3812. Albuminuric Ulceration of the Descending Colon.

139 *d.* The mucous membrane is thickened and stiffened, as from some plastic infiltration; and is "worm-eaten" by irregular, but nearly continuous, ulceration. In places, the intestine was deeply excavated, but nowhere actually perforated. In the recent state the vessels of the wall were much congested, and minute hæmorrhages were observed in its thickness.

From the body of a painter aged 58, who died in the Hospital of peritonitis, presumably due to the above ulceration.

The kidneys were fibrotic and reduced in size; the left ventricle of the heart was hypertrophied.

The patient was admitted for a fracture. He was in an anæmic, debilitated state. The bowels were obstinately constipated, and resisted the action of purgatives for twenty-five days. Abdominal pain and profuse diarrhœa then set in. The latter ceased after thirty-six hours, but the symptoms of peritonitis became more and more severe, and death ensued in five days.

Post-Mortem and Case Book. 1879. No. 299.

3813. Albuminuric Ulceration of the Ileum.

139 *b.* The ileum, the cæcum, and part of the ascending colon are shown. Small ragged ulcerations occur in rather close succession on the mucous surface of the lower two-thirds of the ileum. They are irregularly circular, non-elevated, and generally, though not exclusively, they occupy the Peyerian patches. Few are larger than the section of a pea.

Their edges are clean cut, and no effort at repair is visible. Three have perforated the wall completely.

Pigment was found, in the fresh state, deposited in patches and transverse stripes in the submucous tissue, both of the ileum and of the large bowel. The latter was nowhere ulcerated.

From the body of a man aged 20, who died in the Hospital in consequence of the perforation of the bowel. He was the subject of advanced interstitial fibrosis of the kidneys, the sequel of scarlatina. The kidneys are shown in the preparation, with a section of the heart, the left ventricle of which is greatly hypertrophied. The arterial tension was remarkably high.

Symptoms referable to the condition of the intestine were present the whole time that the patient was under observation—nineteen days. The bowels were constipated, and purgatives were given freely at first.

Post-Mortem and Case Book. 1878. No. 41. *Path. Soc. Trans.* Vol. xxix, p. 117.

3814. Gangrene of the Bowel: Slough Expelled *per Anum.*

151 *a.* The slough is about the size of the palm of the hand. It appears to have formed part of the ascending colon.

From a patient, an adult woman, in the Hospital under Dr. Dickinson. She had suffered for two years from symptoms of suppuration of the right kidney. Pus disappeared from the urine one day, coincidently with the discharge of a considerable amount by the bowel. Soon after, the slough seen in the preparation was expelled. Slight diarrhœa followed, but ceased in a short time, and the patient ultimately left the Hospital free from symptoms of renal suppuration.

3815. Membranous Diarrhœa.

168 *a.* A quantity of dirty-brown shreds of membrane of the consistence of stiff jelly, with a few lumps of opaque whitish mucus.

Microscopically, the shreds show a homogeneous basis, in which the phantoms of columnar cells are distinguishable under a cloud of fat granules.

The patient was a middle-aged woman. She had, when the specimen was obtained (1879), been passing similar matter for nearly twelve months.

Presented by Dr. DICKINSON.

3816. Fibroid Stricture of the Colon.

149 *b.* At the commencement of the descending colon is an

irregularly-rounded cicatrix the size of a florin. The calibre of the gut is here so diminished that in the fresh state it would only admit a No. 12 catheter.

From the body of a man aged 70, who died in the Hospital of partial obstruction of the bowel and consequent peritonitis. He had been troubled with constipation for twenty years or more.

Post-Mortem and Case Book. 1871. No. 31.

3817. Dysentery.
126 *a.* The transverse colon. Its wall is much thickened, and the mucous surface uniformly honeycombed by cicatrised ulcers. See Preparation No. 3818.

3818. Dysentery.
126 *b* Part of the ascending colon, from the same case as No. 3817. Its wall is thickened, and the mucous surface honeycombed, but only in certain patches and lines.

From the body of a patient aged 39, who died in the Hospital. The affection was of three years' date, possibly more.

Post-Mortem and Case Book. 1869. No. 175.

3819. Enteric Fever.
123 *a.* A portion of small intestine from the body of a child, showing the enlargement of the solitary glands and Peyerian patches about the tenth day of an attack of enteric fever.

No history.

Presented by Dr. ALDIS.

3820. Enteric Fever: Perforation of the Ileum: Closure by
133 *a.* Lymph.

Two ulcers are seen in the preparation. One, of oval shape, lies transversely to the axis of the gut. In its floor is a perforation just large enough to admit a bristle (a fine glass rod is passed through it). Its opening on the serous surface was, during life, occluded by a plug of lymph, still seen, which prevented extravasation of fæces.

From a case of enteric fever in a girl aged 11, which ended fatally in the Hospital on the seventeenth or eighteenth day. Peritonitis was general; its symptoms were present for about a day and a half before death.

Post-Mortem and Case Book. 1869. No. 170.

3821. Polypoid Growth of the Intestine.
360. The growth arises from the inner surface of the ileum, near the valve. It is two inches and a half in length, and

nearly two inches wide. It is formed of a dense fibro-muscular coat, surrounding a mass of areolar tissue and fat, and covered by an extension of the mucous membrane of the bowels.

From the same case as No. 3802.

3822. Polypoid Growths in the Ileum.
177 *a*. Eight inches of the ileum are shown. Attached by pedicles to the edges of the transverse folds are seen about a score of polypoid growths, of all sizes up to that of a small walnut. The larger ones are deeply lobulated. They have diminished in size in the process of preparation.

From the body of a woman aged 21, who died in the Hospital (see Preparations No. 3801 and No. 3803). No particular symptoms were present till the fatal obstruction.

Post-Mortem and Case Book. 1869. No. 345. *Path. Soc. Trans.* Vol. xxi, p. 189.

3823. Lymphadenoma.
372. Portions of the ileum and large intestine are shown. The Peyerian patches near the ileo-cæcal valve are somewhat swelled from the presence of lymphadenomatous growth. Some of the glands of the large intestine are similarly affected. To the outer surface of the gut are seen attached some greatly enlarged lymphatic glands.

One of the kidneys is shown in series XI (*v. infra*).

3824. Tubercular Ulceration of the Ileum and Colon: Polypoid
135 *a*. Projection.

Large irregular patches of the intestinal wall are deeply eroded and undermined. The ileo-cæcal valve is all but destroyed. One of the polypoid projections frequently seen as a result of dysenteric ulceration appears on its site.

From the body of a man aged 25, who died in the Hospital of general tuberculosis.

Post-Mortem and Case Book. 1869. No. 344.

3825. Carcinoma of the Transverse Colon: Ulceration of the
173 *a*. Stomach.

A mass of encephaloid carcinoma, as large as the fist, is seen, developed in connection with the wall of the transverse colon. To it the wall of the stomach, not itself affected with carcinoma, is adherent. The tumour pro-

jects into and nearly obliterates the channel of the colon. It has broken down internally, and a large ragged cavity opens into the gut. In the wall of the stomach is a round hole, the size of a shilling, with smooth and even edges, which opens also into the interior of the tumour, and thus places the cavity of the stomach in communication with that of the colon.

From the body of a man aged 50, who died in the Hospital. The symptoms had been persistent vomiting and severe pain in the epigastrium, with extreme anæmia and emaciation. Temporary relief to the symptoms was occasionally observed. In the last stage, vomiting had been less frequent, but the pain more severe. The history preserved of the case previous to admission is scanty and indefinite.

Post-Mortem and Case Book. 1870. No. 126.

3826. Inguinal Hernia.

80 *a.* The sac of an enormous inguinal hernia laid open, showing the coils of intestine *in situ.* The tunica vaginalis is also laid open.

No history.

3827. Femoral Hernia.

84 *a.* A dissected specimen. The sac is seen *in situ.* A finger can be passed through its neck into the abdomen. A mass of omentum is adherent within the ring. The portion that lay in the sac was removed in operation. The obturator artery is seen to arise from the deep epigastric.

From the body of a woman aged 53, who died in the Hospital, forty days after operation for strangulated femoral hernia, owing to suppuration and sloughing about the wound.

Post-Mortem and Case Book. 1866. No. 202.

3828. Femoral Hernia.

84 *b.* A dissected specimen.

* No history.

3829. Strangulated Femoral Hernia: Operation: Artificial Anus.

84 *d.* Through the left femoral ring protrudes a knuckle of small intestine, about five inches in length, which opens externally by an artificial anus. The knuckle is firmly adherent to the edges of the ring. On the pelvic aspect of the preparation a mass of omentum is seen to be held between them by equally firm adhesions.

From the body of a woman aged 66, who died in the Hospital of bronchitis. As far as could be gathered, she had been operated on for strangulated femoral hernia, about a year before her death. Fæces passed freely by the artificial anus.

Post-Mortem and Case Book. 1870. No. 4.

3830. 84 c. Strangulated Femoral Hernia: Subsequent Contraction of the Gut.

A tight fibroid stricture exists at the junction of the jejunum and ileum, occluding the calibre of the bowels to such an extent that water will hardly pass. Above the stricture, the gut is dilated; in the fresh state, it was of a dark slate colour, and had contracted adhesions in the left iliac fossa.

The patient, a woman aged 66, was operated on by Mr. H. Lee on April 28, 1868, for strangulated (left) femoral hernia. Rupture had existed for three years. The wound healed in the course of a month; but from the time of operation the bowels were somewhat constipated, and the patient suffered occasionally from griping pains. On July 3, she suddenly complained of great pain in the abdomen, became collapsed, and died immediately.

Post-Mortem and Case Book. 1868. No. 194.

3831. 85 a. Umbilical Hernia: Superficial Ulceration: Strangulation: Operation.

The sac is as large as an infant's head. Over its upper part, the skin has ulcerated, laying bare the peritoneum. The lower part has been exposed by an incision two inches long, and the neck incised. Post-mortem incisions display the contents of the sac, which consist of portions of the jejunum and transverse colon. A piece of omentum adheres to the neck.

From the body of a woman aged 70, who died in the Hospital of peritonitis, five days after operation for strangulated umbilical hernia. The hernia had existed for ten years. The strangulated portion of gut, a part of the ileum, was returned to the abdomen after division of the stricture; the rest left in the sac, as seen.

Post-Mortem and Case Book. 1873. No. 259.

3832. 103 a. Congenital Umbilical Hernia: Artificial Anus from Sloughing.

From the body of an infant aged five months, who died in the Hospital. At birth, a protrusion at the umbilicus was noticed, and the cord was ligatured at a distance

from the body, so as not to include the protrusion. The skin over the protrusion sloughed; and on the fifteenth day fæces began to pass through the wound.

In the Hospital, a Dupuytren's enterotome was applied. After three days, the fæces began to pass by the anus; but on the eleventh day the child died of peritonitis.

Post-Mortem and Case Book. 1865. No. 321.

3833. Abdominal Hernia.

89 *b.* The left umbilical and lumbar portions of the abdominal wall are shown. In the latter, three inches and a half from the umbilicus, protrudes an oval lump, which has been incised in preparation. The incision displays a cavity the size of a duck's egg, formed in the subcutaneous areolar plane of the abdominal wall. The cavity is lined by a smooth membrane of inflammatory lymph. It contains a coil of jejunum, about twelve inches in length, which has obtained admission through a rupture of the deeper layers of the wall. The edges of the rupture are smooth, being lined with everted peritoneum. The coil of intestine in the sac is glued together feebly by lymph. No strangulation has occurred.

From the body of a man, who died in the Hospital within twenty-four hours after being kicked by a horse. The jejunum was torn across within the abdomen, just beyond the hernia, and fatal peritonitis had resulted. The left ureter was ruptured, and some of the processes of the lumbar and dorsal vertebræ had been broken off.

Post-Mortem and Case Book. 1879. No. 304.

3834. Abdominal Herniæ.

89 *a.* A strip of the abdominal wall, with the skin dissected off. On the internal aspect appear two smooth, round openings, the upper about the size of a shilling, the lower somewhat smaller. On the external aspect, from the upper aperture, protrudes a thin semi-transparent sac, of the size and shape of a pigeon's egg; from the lower, a collection of similar sacs of smaller size. All the sacs appear to be prolongations of the peritoneum.

No history.

3835. Congenital Diaphragmatic Hernia.

99 *a.* In the left tendinous centre of the diaphragm is a large, oval, smooth-edged aperture, through which the cardiac end of the œsophagus, the stomach, transverse colon, and omentum, the upper part of the spleen, and a small lobule at the extreme left of the liver, have gained access to the

left pleural cavity, which they fill. The lung is compressed into small compass, but admits of being inflated.

From the body of a man aged 34, who died in the Hospital, shortly after admission, of pleuro-pneumonia of the right side. No history was obtained.

The right kidney was wanting; or represented only by a small mass of fat, surrounded by a fibrous capsule, in which, after describing a small S-curve, and expanding into a triangular form, the ureter buried itself. The left kidney weighed eight ounces. Otherwise the body was normal.

Post-Mortem and Case Book. 1877. No. 345.

3836. Imperforate Rectum.

68 *a.* The rectum ends in a *cul-de-sac,* about half-an-inch above the anus. It is greatly dilated.

From the body of a female child eight days old. On the sixth day, an attempt was made in the Hospital to open the *cul-de-sac* from the anus, but without success. Colotomy was performed the next day, but it failed to save the child's life.

Post-Mortem and Case Book. 1874. No. 90.

3837. Excision of the Rectum.

37 *a.* The excised portion is shown. It comprises the whole circumference of the last two inches of the rectum, and includes the sphincter. A ring of hard pendulous tumours (adenomata) surrounds the anus. Within the bowel is a ring of similar growths, one of which was found to have ulcerated into the vagina.

Excision was performed, for the relief of symptoms caused by the above tumours, by Mr. Holmes, on November 22, 1877. Recovery was rapid, and the patient, a woman aged 44, speedily improved in health.

Surgical Cases, 1877. No. 1428. *Clin. Soc. Trans.* Vol. xi, p. 113.

3838. Excision of the Rectum.

37 *b.* The excised portion is shown. It comprises the sphincter and the last three inches of the rectum. The lower two-thirds of it is the seat of epitheliomatous ulceration.

Excision was performed, on account of the malignant disease, by Mr. Pick, on October 10, 1878. The patient was a woman aged 52. She rallied from the operation, but died five days after from peritonitis and pelvic cellu-

litis. It did not appear that the peritoneum had been wounded.

Post-Mortem and Case Book. 1878. No. 288.

3839. Fatty Degeneration of the Rectum: Perforation by a
62 *a.* Rectal Tube.

The walls of the rectum are rigid, smooth, and perfectly inelastic, owing to their intimate attachment to an external tube of firm fat. They are not thickened, but both the mucous and muscular coats have undergone degeneration. The mucous membrane is seen microscopically to be almost completely converted into fat; the muscle-cells are blurred, granular, and scarcely recognisable. The tissues, moreover, show a wide-spread small-round-cell infiltration following the distribution of the vessels. The walls of the capillaries are greatly thickened, and studded with nuclei; the external coat of the larger vessels is continuous with a sheath made of small-round cells. Some portions of the infiltration show a tendency to colloid change; others, mainly in the surrounding fat, have developed stout fibroid tissue, which attaches the bowel as described above.

Shallow furrows have been ploughed in the degenerated mucous membrane by the passage of instruments. About five inches and a half from the anus, where the bowel becomes free from the fatty casing, and takes a sharp curve owing to irregular adhesion to the ovary, perforation has taken place.

In its course through the fatty casing, the gut is in two places narrowed to a circumference of two inches. Above the fatty casing it measures four inches and a-half.

From the body of a woman aged 23, a patient in the Hospital, who had suffered for two years from symptoms due to the constriction of the rectum. The perforation, which proved fatal, was due to the passage of a long rectal tube. The use of shorter bougies had previously afforded relief.

Post-Mortem and Case Book. 1879. No. 43.

3840. Recto-Vesical Abscess: Perforation into the Rectum.
47 *a.* No history.

3841. Polypoid Growth of the Rectum, Removed during Life.
362. A lobulated tumour, about the size of a hazel-nut, of a dark grey colour. It consists of a congeries of dilated vessels, from which open numerous cysts or pouches containing pigment; the whole enclosed in a capsule.

Removed by operation from a woman aged 30, a patient in the Hospital. She had suffered from a purulent discharge, and from occasional pain and hæmorrhage in defecation, for nine months. (See No. 3842.)

3842. Polypoid Growth of the Rectum, Removed during Life.
363. A similar growth to that shown as Preparation No. 3841, removed four months later from the same patient. The capsule of the tumour is thickened and white, the pigmentation of the growth showing externally only at one point.

Surgical Cases. 1869. Nos. 138 and 764.

3843. Fibroid Stricture of the Rectum.
149 *a*. Eight inches above the anus the wall of the rectum is, for nearly an inch, greatly thickened by fibroid tissue, and so contracted as almost completely to occlude the calibre of the gut. Before preparation, only a moderate sized catheter could be passed. Below the stricture the bowel is contracted; above, it is greatly dilated. Ulcers appear on the mucous surface for an inch or so above. In the fresh state, they seemed to be in process of healing.

From the body of a woman aged 46, who died in the Hospital of the obstruction caused by the stricture. The symptoms were altogether of about ten weeks' date.

Post-Mortem and Case Book. 1870. No. 109.

3844. Contraction of the Rectum after Syphilitic Ulceration: Perforation by a Bougie.
149 *c*.

The wall of the rectum is thickened throughout, and narrowed by irregular cicatrices, some of which are much depressed below the surface. At the narrowest point, the internal circumference of the gut measures an inch and three-quarters. Nine inches from the anus, the wall is perforated by a round opening, due to the passage of a bougie.

From the body of a woman aged 35, who died in the Hospital from peritonitis, the result of the perforation. Obstruction of the rectal passage had been increasing for some three years, and, about six inches above the anus, the stricture was, during life, tight enough to retain a small bougie.

Post-Mortem and Case Book. 1871. No. 152.

3845. Tuberculosis of the Rectum.
63 *a*. The mucous membrane is studded with nodular elevations of various shapes and sizes, due to growths in the

sub-mucous tissue, which were shown by the microscope to be of tubercular nature. Some are superficially ulcerated.

From the body of a woman aged 25, who died in the Hospital of phthisis and lardaceous disease. She had suffered from diarrhœa and pain in defecation for a period not stated. The rest of the intestine was found free from tubercle.

A drawing of the rectum is shewn in Series XXI (*v. infra*).

Post-Mortem and Case Book. 1867. No. 347.

3846. 376. Scirrhus of the Rectum, with Infiltration of the Surrounding Parts.

The preparation shows the whole of the rectum, and a small portion of the sigmoid flexure. The walls of the former are infiltrated throughout with scirrhous material, and greatly thickened, in places measuring half an inch in width. The distinction between serous, muscular, and mucous layers is clearly discernible. No ulceration of the mucous coat has anywhere taken place. The surrounding glands and connective tissue are infiltrated with scirrhous material.

From the body of a man aged 26, who died in the Hospital. Increasing difficulty in defecation had been experienced for eleven months; and, twelve weeks before death, colotomy was performed to relieve almost total obstruction of three and a half weeks' date. Attempts were subsequently made to dilate the stricture by bougies, its malignant character being at first far from obvious. Death was sudden, after prolonged loss of strength and flesh.

During the early stages of the affection, the motions were loose, and at times involuntary. No obstruction to the flow of urine was experienced; and the bladder, seen at the back of the specimen, is in a natural state.

Post-Mortem and Case Book. 1880. No. 209.

3847. 375. Scirrhus of the Rectum and Surrounding Parts: Urinary Obstruction.

The preparation shows, in front, the rectum cut open from its anterior aspect; displaying, in succession from above downwards—1, healthy tissue; 2, scirrhous thickening; 3, ulceration; 4, a large cloaca, in the ragged sides of which no trace of intestinal wall can be made out; 5, a ring of rounded masses resembling hæmorrhoids surrounding the anus.

At the back is seen the bladder, of small size, with hy-

pertrophied walls; the prostate, not enlarged; and the membranous and prostatic portions of the urethra, which are healthy. The whole is embedded in a mass of swelled glands and thickened areolar tissue, which filled all the rest of the true pelvis.

From the body of a man aged 43, who died in the Hospital, after being under treatment for some six months off and on. Difficulty in micturition was one of the prominent symptoms. The cloaca was formed by the disintegration of a cancerous mass nearly eight weeks before death. From that time the circulation of the scrotum and penis was embarrassed; and part of the prepuce sloughed.

Post-Mortem and Case Book. 1880. No. 27.

3848. Malformation of the Liver.

364. Two fœtal livers joined by their posterior borders.

From a case of joined twins (*v. infra.* Series xviii).

3849. Lardaceous Infiltration of the Liver.

368. The portion of liver shown, from the right lobe, is converted into a waxy mass of pale brown tint, permeated by the opaque white network of Glisson's capsule.

From the body of a man aged 35, who died in the Hospital, with lardaceous disease of all the abdominal organs. He had suffered from an abscess of the scrotum for four years, and from tuberculous disease of one kidney for an unknown period. The liver was found to weigh fifty-nine ounces and a half; the right lobe was more lardaceous than the left. Tubercles were seen in the subperitoneal tissue.

Post-Mortem and Case Book. 1869. No. 233.

3850. Lardaceous Infiltration of the Liver.

257 *a.* The periphery of the lobules is opaque and white; all their interior waxy, semi-transparent, and pale yellow. A dot of relative opacity marks, in most cases, the central vein.

From the body of a boy aged 13, who died of lardaceous disease of the abdominal organs, after suffering from abscesses in connection with disease of the pelvis for four years.

Dr. DICKINSON *On Albuminuria,* p. 216.

3851. Multiple Hæmorrhage in a Fatty Liver.

284 *a.* The liver is shown in section. Scattered thickly throughout its substance are innumerable minute globular

blood clots, about the size of pins' heads. They can be shelled out with ease, and many of their cavities are seen empty on the surface of the section. In the fresh state the clots were of a dark red colour.

The microscope showed the liver cells to be gorged with fat. Among them were spaces, lined by compressed liver cells, and filled with blood corpuscles and leucocytes, the latter accumulated at the periphery of the clots.

From the body of a woman aged 22, who died in the Hospital of tubercular phthisis, three months after amputation for disease of the knee.

Post-Mortem and Case Book. 1878. No. 289.

3852. Acute Yellow Atrophy of the Liver.

259 *a.* In the fresh state, the liver weighed fifty-nine ounces. It was very flabby, and of an uniform bright ochre-colour, both on the surface and on section. The microscope showed extensive wasting and shrivelling of the liver cells. Where the wasting was most advanced, large collections of their nuclei were found, interspersed in a fibrillated stroma.

From a case of enteric fever, in a woman aged 29, fatal in the fourth week, owing to intestinal hæmorrhage. Slight icterus was present during the last thirty-six hours, and profuse epistaxis occurred about twelve hours before death.

Post-Mortem and Case Book. 1870. No. 228.

3853. Cavernous Tumour of the Liver.

374. The growth, about the size of a walnut, is situated at the lower edge of the left lobe. It is shown by the microscope to consist entirely of intercommunicating cavities bounded by fibrous septa, and filled with blood. A thick fibroid layer separates it from the liver.

From the body of a woman aged 60, who died in the Hospital of fracture of the skull. The right lobe of the liver was indented, as from tight-lacing; the gall-bladder was elongated, and full of calculi.

Post-Mortem and Case Book. 1877. No. 143.

3854. Cavernous Tumour of the Liver.

374 *a.* The growth is irregularly globular, and about an inch in diameter. It is imbedded in the centre of the right lobe. In the fresh state its cavities were filled with dark fluid blood. It was in close connection with a large blood-vessel, a branch of the portal vein.

From the body of a man aged 67, who died in the

Hospital of an injury to the brain. Nothing else remarkable was found in the body.

Post-Mortem and Case Book. 1879. No. 129.

3855. Hæmatoidin from an Hydatid Cyst of the Liver.
268 *c.* Some small fragments of an orange-red colour are
* shown. The material was found after death in the secondary cysts, aggregated in masses of various sizes up to that of a horse-bean, of a bright vermilion colour. The growth was of twenty-five years' date.

Post-Mortem and Case Book. 1869. No. 112. *Path. Soc. Trans.* Vol. xx, p. 216.

3856. Gummata of the Liver.
313 *a.* The liver is shown in section. Two gummatous masses are seen, lying beneath the capsule and extending deeply into the liver substance. They are surrounded by an irregular capsule of fibroid tissue; but no general cirrhosis is observable.

Microscopically, they are seen to consist mainly of fibroid tissue. The peripheral layers are highly cellular, and contain numerous permeable vessels filled with blood globules. About midway between the centre of each mass and its periphery, isolated liver cells are found, infiltrated with fat, in meshes of fibroid tissue. Among the meshes granular *débris* and oil globules are also seen.

From the same case as No. 3771.

3857. Growths resembling Encephaloid Carcinoma in the Liver
367. of a Turkey.

The whole liver is thickly studded with nodules of various sizes, resembling encephaloid carcinoma to the naked eye. None are umbilicated on the surface.

The microscope shows none of the characters of carcinoma, but a delicate fibrous network, among the meshes of which numberless minute round glistening bodies, like free nuclei, are entangled. The interspaces of the network are small and empty. The vessels are few and minute; their walls are thickened by fibroid tissue. No large-sized cells occur in any situation. The specimen was referred to Professor Burdon Sanderson, who was unable to determine its exact nature.

The bird, from which the specimen was taken, had been pining away and separating itself from its fellows for twelve months. It was much emaciated when it died.

Pathological Society's Transactions. Vol. xxi, p. 432.

Presented by Dr. Rowland.

3858. Columnar Epithelioma of the Liver.

369. Imbedded in the substance of the liver are a number of irregularly globular morbid growths, varying in size from a pea to a marble. They are not enclosed in capsules, but surrounded by zones of somewhat flattened liver-lobules. They are in no cases elevated above the surface, or broken down, or softened.

Microscopically, the growths show two kinds of morbid tissue—1, a fibroid stroma, imbedding masses of large irregular nucleo-nucleolated cells, as in ordinary carcinoma; 2, loculi of various shapes, with fibroid walls, containing epithelioid cells; presenting the appearance of convoluted gland tubes lined with epithelium. In some of the loculi the cells are flat or angular, and irregularly arranged; in others, they are distinctly columnar, and placed perpendicularly to the walls. The loculi are separated by adenoid tissue, which, in places, is aggregated into oval growths surrounded by dense fibroid tissue. The liver-cells are infiltrated with fat, and, in places, atrophied by the development of adenoid or fibroid tissue in the interlobular planes.

From the body of a woman aged 34, who died in the Hospital of cystic disease of both ovaries, of non-malignant nature, as microscopic examination showed. No carcinoma or epithelioma was found, except in the liver. The liver, in its fresh state, weighed seventy-seven ounces.

Post-Mortem and Case Book. 1870. No. 332. *Path. Soc. Trans.* Vol. xxii, p. 164.

3859. Honeycombing of the Liver by Decomposition.

370. The liver is riddled throughout with small cavities, that in the recent state contained gas and turbid yellowish fluid. Its section presents a close resemblance to a sponge. Microscopic examination showed this condition to be due to decomposition and disintegration spreading from cell to cell, and finally involving the fibrous stroma, until cavities full of amorphous granular *débris* and gas were formed. Between the cavities the liver tissue was found in a natural state.

From the body of a boy aged 16, examined in the month of February, fourteen hours after death by pyæmia. The spleen was in a similar state.

Post-Mortem and Case Book. 1870. No. 67.

3860. Dilatation of the Bile-ducts owing to Obstruction of their

318 *a.* outlet by a Calculus.

The preparation shows a portion of the liver and a

portion of the duodenum, with the gall-bladder, the cystic duct, and the ductus communis. The gall-bladder is small, and its walls thickened. The ducts are greatly dilated. The termination of the ductus communis projects into the duodenum in the shape of a nipple as large as a filbert, its opening being choked by a fragment of calculus.

In the fresh state, the duct was filled with similar fragments for half an inch back. Round it extended an abscess-cavity, which had no visible communication with the biliary passages, but was connected with another abscess-cavity that filled and distended the lesser omentum, and extended in front of the œsophagus, up the posterior mediastinum, to the level of the first dorsal vertebra. There was also slight general peritonitis manifest; the base of the left lung was congested, and the pleura covering it coated with lymph. Some fragments, apparently of biliary calculus, were found in the abscess-cavity first mentioned.

The symptoms, which were mainly severe pain in varying regions of the abdomen, cough, and occasional vomiting and constipation, were of about eight months' date at the time of death, and had commenced suddenly.

Post-Mortem and Case Book. 1880. No. 239.

3861. Calcareous Degeneration of the Walls of the Gall-Bladder.
322 *a.* The gall-bladder is of globular form and as large as a small orange. Its walls are much thickened, and extensively infiltrated with calcareous matter. Its inner surface is very irregular and rugged. It was found after death filled with a whitish purulent fluid, containing small calculi and plates of cholesterin. The cystic duct is patent.

From the body of a woman aged 58, who died, in the Hospital, of peritonitis, induced by carcinoma and perforation of the sigmoid flexure.

Post-Mortem and Case Book. 1869. No. 288.

3862. Scirrhus of the Head of the Pancreas: Stricture of the
328 *a.* Duodenum.

The preparation shows, on one side, the head of the pancreas in transverse section; on the other, the duodenum cut open. A scirrhous tumour is imbedded in the midst of the former. It does not involve the main duct. The wall of the second portion of the duodenum is infiltrated with scirrhus, and so contracted as seriously to narrow the calibre of the gut.

The scirrhous nature of the growth was verified by microscopic examination.

From the body of a man aged 62, who died in the Hospital after sixty days' symptoms, chiefly pain in the epigastrium, constant vomiting, occasionally of altered blood, and constipation. The scanty motions were black in the later stages.

Post-Mortem and Case Book. 1872. No. 298.

X.

DISEASES OF THE LYMPHATIC SYSTEM AND DUCTLESS GLANDS.

3863. 64. Acute Swelling of the Cervical and Mediastinal Lymphatic Glands: Pressure on the Left Innominate Vein.

The preparation shows the tongue; the tonsils, larynx, and trachea; the salivary glands, and some of the structures of the neck; the large vessels in the upper part of the thorax and the root of the neck; and some structures of the anterior mediastinum; dissected out.

The lymphatic glands in the anterior mediastinum, and some of those in the neck, are seen to be greatly enlarged. In the fresh state, they were firm and white, but not caseous. By the swelling of the mediastinal glands, the left innominate vein is compressed. The areolar tissue of the neck is swollen by œdema and inflammatory exudation; especially that of the left side, which is quite brawny. The tonsils and salivary glands are likewise swollen and hard.

From the body of a man aged 23, who died in the Hospital with obscure symptoms. He was epileptic, and of delicate aspect; but robust, muscular, and temperate. He was admitted with increasing cough and dyspnœa of four or five weeks' duration, which had commenced, with nasal catarrh, the morning after a severe wetting; with emaciation and hot night-sweats of a week's date; with a history of hæmoptysis two days back; and with a scarce-healed bubo of six weeks' course. No œdema or albuminuria was present; bronchitic signs were heard in the chest, and the heart-sounds were accentuated.

Under treatment, the cough and dyspnœa lessened, and

the sweats ceased; though no alteration for the better took place in the physical signs. For sixteen days the temperature showed frequent nocturnal exacerbations to 101°—103°, then it rested at 98°—100°.

On the twenty-second day of admission, a faint trace of albumen was noticed in the urine, which had a specific gravity of 1013. On the twenty-sixth, œdematous swelling of the tonsils appeared, and the temperature began to rise. With augmenting pyrexia, the tonsillitis increased; and puffy swelling extended to both sides of the face, then to both sides of the neck, and, finally, to the upper part of the front of the thorax. Profuse diarrhœa set in on the twenty-eighth, but ceased, under treatment, next day. On the thirty-first, an attempt was made to give relief by an incision in the mid-line of the neck, but only a little serum was let out, and the patient, moribund before, died a quarter of an hour after the operation.

The urine, on the twenty-seventh, was slightly albuminous, of the specific gravity of 1009. The temperature on the morning before death marked 104.8°.

Besides the lesions seen in the preparation, post-mortem examination showed punctiform ecchymoses on the kidneys and pericardium, patchy inflammation of the pleura, and opaque white deposits, apparently the result of catarrhal pneumonia, in the lungs. The scrotum was œdematous. A simple stricture, aggravated by œdema, was found in the left ureter. The left kidney was double the size of the right; both were large and pale, and their Malpighian corpuscles lardaceous. Together, they weighed twenty-eight ounces. The blood was fluid, the heart soft, the liver fatty, the spleen engorged, weighing twenty-three ounces, and the brain slightly œdematous.

The lesions were ascribed to the influence of septic poisoning. (*St. George's Hospital Reports.* Vol. x, p. 27.)

Post-Mortem and Case Book. 1879. No. 187.

3864. Tuberculous Swelling of the Bronchial Glands.

vii, 115 *a*. A dissection, showing the left lung, the heart and great vessels, the bronchi, trachea, and larynx, and the lymphatic glands in the neighbourhood of these structures; from a child's body.

The lung is riddled with tubercular deposits and vomicæ. The lymphatic glands are greatly swelled and caseous; especially those about the roots of the lungs, which seriously compress the main bronchi.

No reference.

3865. Tuberculous Swelling of the Mesenteric Glands.

A racemose mass of lymphatic glands, enlarged and caseous. A section has been made, showing many of them broken down in the middle. The preparation shows also about fifteen inches of the ileum, on the mucous surface of which appear some small ulcers, with slightly raised edges, oval in shape, and placed transversely to the axis of the gut. Some have been formed in the Peyerian patches.

No reference.

3866. 17 *a*. Carcinoma of the Abdominal Lymphatic Glands, the Receptaculum Chyli, and the Thoracic Duct.

The preparation shows the pelvic viscera, a portion of the mesentery, and the organs lying behind the peritoneum in the right half and the middle line of the abdomen. Both ovaries are carcinomatous, and the pelvic organs are closely packed in carcinomatous tissue, which encircles the sigmoid flexure, and forms a large mass behind the right os pubis. The lumbar and mesenteric glands are infiltrated with carcinoma, and enormously enlarged. The mesentery and the supra-renal capsule are infiltrated to some extent, as was also the pancreas. The hilus of the kidney is closely packed with the enlarged glands, and the kidney itself slightly encroached upon.

The receptaculum is distended with carcinoma, and measures one-third of an inch in thickness; the thoracic duct is not distinctly traceable through the mass of glands in front of the vertebræ. (See No. 3867.)

3867. 17 *b*. The Posterior Mediastinum, and the Structures of the Left Side of the Neck, from the same Case as No. 3866.

The lymphatic glands are throughout infiltrated with carcinoma, and greatly enlarged. The pleuræ and lungs were likewise affected, but this does not appear in the preparation.

The termination of the thoracic duct is seen. The duct is filled with carcinomatous material; and an extension of the same growth distends the greater part of the length of the subclavian and innominate veins, and the lower third of the internal jugular.

The carcinomatous nature of the growths was established microscopically. It was specially noticed that the cells presented an epitheliomatous aspect, and occurred in very large clusters, not unlike the columnar cell-groups of epithelioma.

From the body of a woman aged 37, who died in the Hospital. The case was of five hundred and eight days' duration. The earliest symptom, pain in the abdomen and interscapular region, commenced two days after parturition. A tumour appeared in the left subclavian region within six weeks later. The symptoms were much relieved, and the cervical tumour was said to have lessened, between the third and the ninth months.

Post-Mortem and Case Book. 1879. No. 277.

3868. Lymphatic Glands in Lymphadenoma.

64 *a.* A horse-shoe chain of enlarged submaxillary glands, surrounding the arch of the hyoid bone; also some of the mesenteric and lumbar glands, greatly enlarged.

From the same case as No. 3885.

The enlargement of the cervical glands was first noticed seven months before death. At the end of the third month it was such as to threaten suffocation; but the opening of an abscess averted this termination.

3869. Enormous Bronchocele: Removal by Operation.

23 *a.* On June 19, 1872, Mr. Holmes operated on a woman aged 65, the subject of an enormous bronchocele, which had been growing for forty years. The tumour hung down below the waist, and its pedicle was as thick as a man's arm. About six weeks before the operation, it had burst, and discharged two pailfuls of a glairy fluid, tinged with blood. Suppuration of the great cyst from which the discharge came had followed, and the patient was gradually sinking under its effects.

The lower part of the tumour was surrounded by incisions, flaps of skin dissected off, vessels divided between ligatures, and the soft parts dissected from the base of the growth. The pedicle was then encircled with the chain of an écraseur, and the mass cut away. A portion of the cyst was thus left. The vessels having been secured, and the écraseur removed, the remains of the cyst were partly dissected off and partly surrounded by ligatures. They were so intimately connected with the trachea as to render it impossible to pass the chain of the écraseur fairly below the cyst. The patient died thirty-nine hours after the operation, of erysipelas.

The mass removed is shown in the preparation. It weighed rather over seven pounds in the fresh state. It forms an enormous cyst, large enough to hold an infant's head, surrounded by thick walls, which contain nodules of

calcareous matter, and a few secondary cysts. The main cyst constituted almost the whole of the bronchocele.

No post-mortem examination was made.

American Journal of the Medical Sciences. New Series. Vol. lxv, p. 17.

Presented by Mr. HOLMES.

3870. Cystic Bronchocele: Hæmorrhage into the Cysts.
27 a. Two cysts are seen, each the size of an orange; the one developed from the isthmus, the other from the right lobe, of the thyroid body. The left lobe is flattened out over the former. The cavities of the cysts are filled with blood-clot. The clot in the right hand cyst was, in the fresh state, decolorised, semi-transparent, elastic, and concentrically laminated; that in the central cyst was decolorised only in the middle.

From the body of a woman aged 67, who died in the Hospital of pericarditis due to granular disease of the kidneys. She was admitted for epistaxis twenty-three days before death. There is no history of the bronchocele.

Post-Mortem and Case Book. 1872. No. 282.

3871. Cystic Bronchocele: Death by Compression of the
24 a. Trachea.

The whole of the thyroid body is enlarged. The left lobe has attained the size of an orange, and is mainly constituted by a single cyst. The central portion and the right lobe form a mass somewhat smaller, and contain several cysts. The trachea is compressed into a triangular form, the apex of the triangle being in front. The sides of the triangle are curved inwards, so that at one point the passage is not more than a sixth of an inch in width. The wall of the trachea is of normal thickness.

From the body of a lad aged 17, who died in the Hospital. He suffered from paroxysms of dyspnœa, one of which ended fatally. The bronchocele had been growing for eighteen months.

Post-Mortem and Case Book. 1861. No. 95. *Path. Soc. Trans.* Vol. xii, p. 229.

3872. Soft Bronchocele: Death by Compression of the Trachea.
24 b. Both lobes of the thyroid body are enlarged, each forming a lobulated mass the size of half an orange. The isthmus is of natural size. The trachea is compressed into a triangular form, the apex being forwards. The sides of the triangle are further curved inwards, and the posterior wall doubled inwards, so that the passage in one

place is reduced to a mere slit. The walls of the trachea are thinner than normal. The recurrent laryngeal nerves are dissected out in the preparation. They appear to have been somewhat pressed upon by the bronchocele, just before entering the larynx.

From the body of a boy aged 15, who died in the Hospital in consequence of the obstruction to the breathing. Slight dyspnœa and stridor had been present for sixteen months, and on the increase for eight weeks; but the goître had not been noticed till three days before death, when dyspnœa had become urgent. Tracheotomy was not allowed by the patient's friends.

Post-Mortem and Case Book. 1878. No. 71.

3873. 27 *b.* Sebaceous Cyst simulating Bronchocele: Puncture and Injection: Fatal issue.

A sebaceous cyst the size of a Tangerine orange is seen in the front of the neck, covering the position of the isthmus of the thyroid gland. A large vein, apparently a subcutaneous branch of the anterior jugular, crosses the cyst on its right side. The vein is filled with beads of hard brittle clot, of a bright reddish-brown colour. It is punctured where it crosses the cyst; and the tissues around are stained of the same reddish-brown. Patches of similar staining are seen in the interior of the innominate vein (shown in the preparation), opposite the mouth of the anterior jugular; and the last named vessel contains clot of the same character as that in the subcutaneous vein.

The thyroid body, shown in the preparation, is considerably larger than normal.

From the body of a man aged 23, who was admitted into the Hospital for the tumour in the front of the neck, which was supposed to be altogether, as in part it really was, a soft goître. Injection with perchloride of iron was ordered. As soon as the injection was commenced, the patient complained of a burning sensation down the right side of the neck. Dyspnœa followed, and increased until the patient died, seven hours from the operation.

Small clots of similar character and colour to those in the veins were found in the right ventricle of the heart and in several branches of the pulmonary artery, but no thrombi were found. The lungs and kidneys were congested.

Post-Mortem and Case Book. 1879. No. 181.

3874. Carcinoma of the Thyroid Body: Extension to the
20 *a.* Larynx and Trachea.

The thyroid body is replaced by a mass of encephaloid carcinoma of about the dimensions of a cricket-ball. The mass is placed more to the right than the left of the median line. It is enclosed in a tough fibrous capsule, which has been incised in preparation. The larynx and trachea were found displaced to the left. The morbid growth has penetrated the right wall of the larynx and trachea, and appears on their inner surface as a group of fungating masses for half an inch above and an inch below the lower border of the cricoid cartilage.

From the body of a man aged 43, who died in the Hospital from the obstruction to the breathing caused by the growth. The tumour had first been noticed about five or six months before death. Hæmoptysis took place four days before death.

The microscope showed the growth to consist of encephaloid carcinoma, in which were scattered accumulations of yellow puriform fluid, each surrounded by a zone of congestion. Small growths of similar nature were found in the lungs, and one larger one uniting the right lung to the pericardium.

Post-Mortem and Case Book. 1877. No. 261.

3875. Calcification of the Suprarenal Capsules.
34 *a.* The suprarenal capsules, the semilunar ganglia, and the neighbouring structures are shown, dissected out. The suprarenal capsules are greatly altered in shape and consistence. Their surfaces are interrupted by deep sulci, and the left capsule is distinctly lobulated. The islands bounded by the sulci contain both cortical and medullary substance, but the former is irregularly infiltrated with calcareous material. The calcification is most advanced in the lower part of the right capsule. The semilunar ganglia and their branches appear healthy.

From the body of a woman aged 37, who died in the Hospital after an illness of extremely obscure character, on which the post-mortem examination threw little light. An account of the case is given in *St. George's Hospital Reports*, Vol. x, p. 116.

Post-Mortem and Case Book. 1879. No. 339.

3876. Carcinoma of both Suprarenal Capsules.
51 *a.* The capsules are shown. They are nearly twice their normal size, and composed almost entirely of firm carcinomatous (encephaloid) tissue. In one or two situa-

tions, in the recent state, a little brownish colour indicated the survival of the normal structure. The two organs weigh together seven drachms.

From the body of a man aged 56, who died in St. George's Hospital of carcinomatous disease of many organs. No bronzing of the skin, or other symptoms of "Addison's" disease, were present.

Post-Mortem and Case Book. 1866. No. 28. *Path. Soc. Trans.* Vol. xvii, p. 303.

3877. "Addison's" Disease.

52 *a.* The two suprarenal capsules, from a case of "Addison's" disease. They are enlarged, nodulated, and hard; and, on section, are found to be occupied by caseous material.

Under the microscope, granular matter, shrunk cells, nuclei, and cholesterin crystals are seen.

From the body of a woman aged 25, who had been ill for ten months with lassitude, pain in the lumbar region, and vomiting. She was pregnant when the illness commenced, and was delivered of a child three months before death. A month before death she sought medical advice. The skin was then so discoloured that the affection was mistaken for jaundice. On the day of her death the patient was seen by Dr. Reginald Thompson. The skin was covered with patches of a dark bronze colour. The conjunctivæ were of a pearly-white. The pulse was scarcely to be felt. She complained of pain in the back, and occasional vomiting. She sank, and died quietly. The suprarenal capsules alone were examined *post-mortem.*

Presented by Dr. Reginald Thompson.

3878. Atrophy of the Spleen.

61. A spleen, measuring only two inches in length, and barely an inch and a quarter in its greatest breadth; but healthy in structure.

From the body of a woman aged 52, who died in the Hospital after an operation for the removal of carcinomatous glands from the left axilla. The axillary artery was divided, but no great amount of hæmorrhage took place either during or after the operation. Nothing else remarkable was found in the body.

Post-Mortem and Case Book. 1870. No. 66.

3879. Abscess of the Spleen, from Perforating Ulcer of the
38 a. Colon.

The spleen is shown, with portions of the diaphragm, the stomach, the pancreas, and the splenic flexure of the colon, all firmly adherent to it. The spleen is cut open, showing a great part of its extent occupied by caseous abscesses. The marks of a small abscess are seen in the hilus, and its cavity is placed in communication with that of the colon by three small circular perforations of the splenic flexure.

From the body of a lad aged 18, who died in the Hospital. He had suffered from alternate diarrhœa and costiveness for about four years and a half. Pain appeared in the left inframammary region twenty-five weeks before death, and, seven weeks later, became severe, with marked constitutional symptoms referable to suppuration. Improvement in the condition took place at a later stage in the Hospital, but the left lung and pleura subsequently becoming inflamed, the patient sank and died. The bowels showed no other evidence of disease.

Post-Mortem and Case Book. 1879. No. 64. *St. George's Hospital Reports.* Vol. ix, p. 197.

3880. Calcification of the Capsule of the Spleen.
60.

The spleen is of less than normal size. Its structure is natural, but its capsule is much thickened, and so indurated by calcareous infiltration that it cannot be cut with a knife.

From the body of a woman aged 64, who died in the Hospital of cerebral hæmorrhage. The arteries at the base of the brain were atheromatous, and marked fibrotic changes were present in the liver and kidneys.

Post-Mortem and Case Book. 1868. No. 311.

3881. Lardaceous Infiltration of the Spleen ("Sago Spleen").
63.

A spleen of rather more than the normal size. Its section is thickly studded with minute specks of waxy aspect—Malpighian corpuscles infiltrated with lardaceous material—which stain of a vandyke-brown colour with iodine.

From the body of a man aged 21, who died in the Hospital with lardaceous disease of various organs, secondary to caries of bone. Symptoms referable to disease of the kidneys had been present for six months or so; the date of the caries does not appear.

Post-Mortem and Case Book. 1871. No. 132.

3882. Carcinoma of the Spleen.

59 *a.* Projecting from the concave surface of the spleen, but covered by its capsule, are three spherical masses the size of pigeon's eggs, close together. Two are shown in section. They are distinctly circumscribed. In the fresh state they presented the colour and texture of healthy splenic tissue, but, in the centre of one (the uppermost of the two shown in section), was a small whitish nodule.

Microscopically, the whitish nodule was seen to be of purely carcinomatous structure. The remainder of the nodules consisted of splenic tissue affected with carcinoma; the cells of the latter being infiltrated into the meshes of the former.

From the body of a man aged 24, who died in the Hospital of multiple carcinoma secondary to encephaloid disease of the right femur aud innominate bone. See also Preparation No. 3677.

Post-Mortem and Case Book. 1869. No. 84.

3883. Encephaloid Carcinoma of the Spleen.

39 *a.* The upper two thirds of the spleen are replaced by a mass of encephaloid carcinoma the size of an orange. The capsule extends over the morbid growth. The whole organ weighed, when fresh, sixteen ounces.

From the body of a man aged 50, who died in the Hospital of carcinoma of the peritoneum and abdominal glands, the symptoms of which were of five or six months' date. He was in Hospital but a fortnight. The splenic tumour was distinctly palpable through the abdominal wall.

Post-Mortem and Case Book. 1873. No. 206.

3884. Tumours in the Spleen of a Turkey, resembling Carcinoma.

62. The spleen from the same bird as No. 3857. A large number of spherical growths, of the same character as those in the liver, are scattered throughout its extent. In the centre a larger mass is formed by the confluence of such growths.

3885. Lymphadenoma of the Spleen.

64 *b.* The spleen is not of unusual size; in the fresh state it weighed eight ounces. Its capsule is covered with loose adhesions. Spherical masses of lymphadenomatous growth are thickly scattered throughout its substance, and appear on the surface beneath the capsule. They average about a third of an inch in diameter,; the largest measures

about two-thirds of an inch. They are circumscribed, but not encapsuled.

From the body of a lad aged 18, who died in the Hospital, of lymphadenoma and tuberculosis, after nearly seven months' symptoms. The lymphadenoma in this case was hardly distinguishable, on microscopic examination, from the tubercle. In the lungs and kidneys, growths occurred, which appeared to be rather of tuberculous than lymphadenomatous nature. In the swollen lymphatic glands and the splenic tumours the latter character preponderated.

Post-Mortem and Case Book. 1878. No. 329. *Path. Soc. Trans.* Vol. xxix, p. 373.

3886. Tubercle of the Spleen.

45 *a.* A section of a spleen showing two globular masses of caseous and partly cretaceous matter, each surrounded by a thin fibroid capsule.

They are stated to be of tubercular nature, and to be from the body of a girl who died of chorea.

No further history.

3887. Hydatids in the Spleen of a Pig.

48 *a.* Scattered through the extent of the spleen are six hydatid cysts, each about the size of a large marble.

Presented by Mr. VINCENT.

XI.

DISEASES OF THE KIDNEYS AND URETERS.

3888. Misplacement of the Left Kidney.

51 *a.* A dissection showing the kidneys, urinary tracts, bladder, suprarenal capsules, and the large vessels of the abdomen. The left kidney, which is rather larger than the right, is situated below the bifurcation of the aorta, more to the left side than the right, covering the position of the left sacro-iliac synchondrosis. Its pelvis is directed forwards and upwards. Its ureter runs straight to the bladder; it is double at its commencement. The left renal artery arises just above the bifurcation of the aorta. The left suprarenal capsule is in the natural position; and

into its vein, the left renal vein, which is of smaller calibre, opens.

From the body of a boy aged 12, who died in the Hospital of pyæmia.

Post-Mortem and Case Book. 1869. No. 117.

3889. Malposition, and Cystic Degeneration, of the Left Kidney.
52 *b.* The preparation shows the base of the bladder, the right ureter and kidney, the left ureter, the structure representing the left kidney, and its arterial connections.

The right kidney is unduly large—in the fresh state it weighed seven ounces; its cortex is swelled and fatty; its ureter is natural. The left ureter measures but five inches, half the length of its fellow; it is patent throughout, but of small calibre. The left kidney is represented by a simple oval cyst, about three inches and a half in length, into which the ureter opens. A very thin layer of renal tissue lines its wall internally. The cyst, it will be seen from its vascular connections, was situated in the body in front of the vertebral column, just below the bifurcation of the aorta, lying nearly transversely. It was supplied by a large artery arising from the aorta just above its bifurcation, and by several smaller ones from the common iliacs.

From the body of a man aged 32, who was admitted into the Hospital for an attack of cerebral hæmorrhage, and died in consequence of hæmorrhage from a gastric ulcer. The left ventricle of the heart was markedly hypertrophied. The urine during life was of golden colour, acid reaction, and normal specific gravity, but contained a considerable amount of albumen.

Post-mortem and Case Book. 1878. No. 111.

3890. Horseshoe Kidney.
52 *a.* The kidneys are united in front of the vertebral column, forming in effect a single organ, which is apparently healthy in structure. It is supplied by numerous vessels, and has three or more distinct hiluses.

From the body of a man aged 34, who died in Hanwell Asylum.

Pathological Society's Transactions. Vol. xxiii, p. 164.

Presented by Dr. DICKINSON.

3891. Double Kidneys and Ureters. (Tuberculous disease.)
23 *b.* The kidneys, ureters, and bladder are shown. Each kidney is made up of two nearly equal portions, an upper and a lower, opening into separate ureters. The four

ureters are distinct in the whole of their course, and each one has its separate orifice in the bladder.

The urinary tract is affected with tuberculous disease. The prostate is replaced by caseous matter; ulcers appear in the bladder; the two lower portions of the kidneys are almost entirely converted into sacculated cysts; the corresponding ureters are dilated and thickened. The upper portions of the kidneys are affected by tubercle, but in an earlier stage; and their ureters are healthy.

From the body of a man aged 45, who died in the Hospital. The lungs and intestines were affected also by tubercle.

Post-Mortem and Case Book. 1877. No. 194.

3892. Rupture of the Kidney: Recovery.
74. The right kidney: A firm fibroid cicatrix is seen at its upper end, the capsule being adherent about it. The kidney appears otherwise healthy.

From the body of a non-commissioned officer in the 1st Life Guards, who died of enteric fever in 1871. In 1869 he had received a kick from a horse. The accident was followed by all the symptoms of rupture of the kidney.

Presented by Mr. EDGCOMBE VENNING.

3893. Atrophy of the Kidney, with Fibrosis, from Malformation
64. of the Renal Artery.

The right renal artery ends in a *cul-de-sac*, about half an inch from the aorta. From its extremity arise two small branches, about the size of crow-quills, which run in a parallel direction to the kidney, and form its whole arterial supply. The kidney is very small, and weighs but six drachms. Its capsule is adherent, and its surface granular; many cysts appear in its substance.

From the body of a man aged 48, who died of pleuro-pneumonia. The urine contained, during his illness, both pus and albumen. The right kidney was hypertrophied, and weighed twelve ounces. The ureters and bladder were healthy.

Pathological Society's Transactions. Vol. xix, p. 281.

3894. Atrophy of the Kidney.
6 a. A pair of kidneys is shown. The right is very small, and weighs but three drachms and a half; the left is larger than normal, and weighs seven ounces and three quarters. The surfaces of both are coarsely granular. The cortex of the left is unduly thin. Very little secreting structure exists in the right, and its cones are indistinct. The

walls of the right renal artery are unduly thick and its channel narrow. The ureter was pervious throughout.

From the body of a man aged 41, who died in the Hospital, with symptoms of chronic renal disease. The heart was greatly hypertrophied; its pericardium universally adherent.

Post-Mortem and Case Book. 1870. No. 196.

3895. Thrombosis of the Renal Veins.

67. The left kidney is shown, in section. It is much larger than natural. All its veins, down to the smallest visible, are blocked by firm coagulum. The coagulum adheres to the walls of the vessels. It was nearly colourless when the organ was removed; what colour was then seen remains still. It filled the renal vein as far as its opening into the vena cava, and extended a short distance into the spermatic vein. The left iliac vein was similarly occupied by clot, though the vena cava was in a healthy state.

Microscopic examination showed the capillaries of the kidney to be greatly distended and full of blood. Minute patches of extravasation occurred here and there, compressing the tubes.

From the body of a woman aged 42, who died in the Hospital. She was admitted about four and twenty hours before death, in a semi-delirious condition, with the right (left ?) leg swelled by œdema. The breath was offensive; sputa, like prune juice, were coughed up; the urine contained much albumen, and, on one occasion, blood. The only history obtainable was that the patient had led a very intemperate life, and had been "ailing" for two or three months, suffering chiefly from swelling of the legs. The results of physical examination were indefinite.

Post-mortem examination revealed, besides the lesions illustrated by the specimen, some circumscribed patches of gangrene in the lungs, and, at the lower part of the right, two or three small abscesses, bounded by a limitary membrane. No "ante-mortem" clots were contained in the heart, the right kidney was quite healthy, and nothing else to call for remark was found in the body.

Post-Mortem and Case Book. 1869. No. 60. *Path. Soc. Trans.* Vol. xx, p. 229.

3896. Embolism of the Kidney.

69. The kidney is shown in section, the capsule being partly removed. The removal of the capsule shows patches of blood extravasated on the surface of the organ. A

fibrinous infarct occupies the cortex of the lowest part. Two portions of it are of old date; the rest appeared to be recent when the kidney was removed.

From the same case as No. 3656.

3897. Lardaceous Infiltration of the Kidney.
17 a. The kidney shown is somewhat larger than normal. Its surface is smooth, but the capsule partially adherent. The section shows the Malpighian corpuscles enlarged, translucent, and easily distinguishable from the surrounding tissue. Striæ of similar appearance are seen in the pyramids, owing to lardaceous infiltration of the arteries in that situation.

From the same case as No. 3881.

3898. Lardaceous Infiltration of the Kidney.
72. The kidney is larger than normal. Its surface is seamed with shallow depressions. Its cortex is increased in depth. The application of iodine reveals straight lines of lardaceous infiltration running close to each other in the pyramids; at wider distances in the cortex. They are shown by the microscope to be intertubular. The Malpighian bodies are not lardaceous.

From the body of a boy aged 10, a patient under Mr. Haward at the Hospital for Sick Children, suffering for two years and a half from caries of the pelvis, with profuse discharge of pus. Death took place on September 28, 1871. The liver, spleen, intestines, and lymphatic glands were also lardaceous.

Presented by Mr. HAWARD.

3899. Acute Nephritis: Early Stage.
71. The kidney shown (both were alike) is much larger than normal, and weighs nearly ten ounces. The surface is smooth; the capsule has separated without splitting. The microscope shows extensive blocking of the uriniferous tubes by swollen and granular epithelial cells. The capsule and the walls of the vessels are natural in all respects, and there is no interstitial fibrosis. To the naked eye, the appearance was simply that of congestion.

From the body of a man aged 54, who died on the seventh day of an attack of pleuropneumonia. The urine was examined two days before death, and found to be clear, and slightly albuminous, and to contain a slight trace of sugar. No œdema is recorded.

Post-Mortem and Case Book. 1872. No. 297.

3900. Large Granular Kidney.
14 *a*. The capsule is adherent, the surface is coarsely granular, the cortical region is greatly thinned, and some cysts appear on the surface; but the kidney is not, as a whole, diminished in size. With its fellow, which was in a precisely similar state, it weighed fourteen ounces.

From the body of a man aged 62, who died in the Hospital of exhaustion after amputation of the thigh for gangrene of the leg. The left ventricle of the heart was hypertrophied.

Post-Mortem and Case Book. 1869. No. 342.

3901. Large Granular Kidney.
14 *b*. The kidney is considerably larger than normal, but, in other respects, it is of the "granular" type.

From the body of a man aged 45, who died in the Hospital of phthisis and pleurisy. There was no dropsy. The urine contained a trace of albumen.

Post-Mortem and Case Book. 1877. No. 349.

3902. Granular Kidney.
65. The kidney, which is small in size, and coarsely granular on the surface, weighs but an ounce and a half.

From the body of a woman aged 21, who died in the Hospital of pericarditis. Symptoms of renal disease had been present for about twelve months. The urine was copious, pale, and highly albuminous.

Post-Mortem and Case Book. 1868. No. 259.

3903. Surgical Kidney: Compression of the Pelvis by Fatty
73. Growths.

The greater part of the renal structure is replaced by cysts formed by dilatation of infundibula. Between the infundibula large masses of firm fat have appeared, compressing the pelvis.

From the body of a man aged 56, who died in the Hospital. The condition of the kidneys was due to old-standing obstruction in the membranous portion of the urethra.

Post-Mortem and Case Book. 1873. No. 49.

3904. Stricture of the Ureter.
9 *c*. The kidney and ureter (the left) are shown. A fibrous stricture is seen in the latter, about four inches below the pelvis. The canal above is dilated, and its mucous lining still preserves a brownish red mottling, due to the intense congestion which was perceived in the recent state. The

tube was then filled with dark sanious fluid, and the stricture much aggravated by œdema of the walls. Some small ulcers are seen on the mucous membrane.

The kidney is swelled—it weighed fourteen ounces in the recent state; its tubes are blocked with epithelium, its interstitial tissue in course of proliferation, and its Malpighian tufts infiltrated with lardaceous material. Points of ecchymosis are scattered over the surface.

From the same case as No. 3863.

3905. Stricture of the Ureter. (Calculus in the Ureter.)
4 a. A part of the bladder is shown, comprising the base and neck, with portions of the ureters and urethra. The left ureter is thickened and contracted, and nearly impervious—it was so in its whole length. A small bristle can be passed down till it reaches the vesical portion, and for half an inch further; then it is arrested. No sign of an orifice is seen in the bladder.

The right ureter is pervious, but its vesical orifice is blocked by a dark brown plug, apparently formed from the fragments of a lithic acid calculus. Ecchymosis appeared around the orifice in the recent state.

The left kidney was much shrunk, and reduced to a mere aggregation of cysts with tough fibroid walls. A small calculus was impacted in one infundibulum. The right kidney was in a nearly healthy condition, but its infundibula, pelvis, and ureter were dilated and full of urine.

A drawing is shown in Series XXI (*v. infra*).

The patient, from whose body the specimen was taken, a man aged 62, died after ten days' complete suppression of urine. A similar attack, of three days' duration, had taken place about a month before; up till then the patient had believed himself to be in excellent health. He had suffered twenty years previously from an attack of general anasarca. He was accustomed to remain at times for about eight hours without passing water, though at other times, especially during the night, he would micturate at short intervals. He had never suffered from stricture or calculus.

Pathological Society's Transactions. Vol. xvi, p. 176.

Presented by Dr. BAGSHAWE.

3906. Obstruction to the Left Ureter during Fœtal Life: Destruction of the left Kidney. (Double Right Ureter.)
7 a. The left kidney is reduced to the condition of a simple membranous sac. The left ureter is greatly dilated from end to end, and tortuous. The right ureter is double to

within half an inch of its vesical end. The two ureters thus formed are of about the normal calibre. The obstruction to the left ureter was due to a small but very loose fold of mucous membrane, in the portion of the tube that is contained in the thickness of the wall of the bladder. This fold was pushed downwards and formed a perfect valve.

In the same subject the anus was wanting, and the bowels transposed.

Presented by Mr. HOLMES. 1878.

3907. Calculus in the Ureter.

45 *a*. The ureter (the left) is blocked at its commencement by a dark-coloured calculus. The kidney is two or three times its normal size, but consists of little else than a large cyst divided by fibroid partitions. A little renal tissue remains in the outer wall.

From the body of a man aged 26, who died in the Hospital, a few hours after admission, of pneumonia. The right kidney was enlarged and congested, but of healthy structure. It weighed ten ounces.

Post-Mortem and Case Book. 1869. No. 113.

3908. Obstruction of the Ureter by a Calculus.

9 *b*. The left ureter and some of the surrounding structures are shown. Within the ureter, at its upper end, are seen the remains of a large friable calculus, which had completely blocked the canal. About six inches below, the ureter is somewhat dilated for about half an inch, and in this portion the wall is perforated, and a small opening leads into a pouch the size of a pea, which in the fresh state contained pus and a minute fragment of calculus.

To the ureter is adherent the appendix cæci, in which is an oval concretion the size of a small bean.

The kidney, in this case, was replaced by an abscess, bounded above, below, and internally, by the liver, the psoas muscle, and the vertebral column. The two latter were eroded deeply, and the branches of the lumbar plexus lay loose in the pus, the disintegrating action of which they had resisted.

From the body of a woman aged 38, who died in the Hospital. She had suffered from severe pain in the right lumbar region for about eleven weeks, and had noticed a white deposit in the urine during the same length of time.

Post-Mortem and Case Book. 1871. No. 195.

3909. Renal Calculi: Atrophy of the Kidneys.

12 *a*. The kidneys and ureters, a portion of the bladder, and a section of the heart are shown. The kidneys are very

small (weighing four ounces only), owing to atrophy of their secreting and tubular tissues; the infundibula and pelves being of normal size. Their surfaces are coarsely granular. In the remains of the renal tissue, small dark green calculi are embedded. The ureters are not abnormal, but the vesical portion of the left is blocked by an accumulation of small calculi. The walls of the ventricles of the heart are seen to be hypertrophied. The bladder, which contained a small stone, is also hypertrophied.

From the body of a man aged 21, who died in the Hospital. He was admitted a week before death in a state of extreme anæmia, very dull and stupid, bleeding from the nose and gums. He vomited at intervals; and complained of pain at the heart, which palpitated violently, and was perceived to be enlarged. Respiration was singularly slow—ten to fourteen in the minute. The urine was pale and alkaline, and contained blood and much albumen.

The hæmorrhage was said to be of six weeks' date, but no further history of the above symptoms could be obtained from the patient. Under treatment the bleeding ceased; but five days after admission cardiac pain and palpitation became severe, nausea and faintness set in; and these symptoms continued to increase till death ensued.

Two convulsive fits were reported about five weeks before admission. They are possibly referable to a depressed fracture of the skull, which had existed for two years, and caused thickening of the cerebral membranes.

Post-Mortem and Case Book. 1877. No. 150.

3910. Renal Calculus.

50 *a.* The pelvis is occupied by a dark red calculus the size of a walnut, which is chiefly composed of oxalate of lime, but contains a little phosphate of lime and uric acid. The kidney is of about half its normal size, lobulated and granular on the surface. Section shows the infundibula greatly dilated at the expense of the renal tissue, which is reduced to a thin layer, and in places altogether absent. The whole weighs an ounce and a half.

From the body of a man aged 50, who died in the Hospital with bronchitis of five months' and dropsy of six weeks' duration. The urine was pale, clear, and slightly albuminous.

The opposite kidney (the right) was of large size, weighing seven ounces; but granular on the surface, with deficiency of cortex. The heart was much hypertrophied.

Post-Mortem and Case Book. 1870. No. 322.

3911. Renal Calculus.

53 *b.* The pelvis of the kidney shown (the right) is expanded to form a sac considerably larger than a turkey's egg. The kidney is reduced in size, and conspicuously lobulated. Its substance is further encroached on by dilatation of the infundibula.

The calculus which occupied the pelvis is shown in the preparation. It is formed of oxalate of lime, and weighs seven ounces and a half. The greater part of its surface is marked by low ridges, set in an irregular hexagonal pattern. The wall of the pelvis was found tightly stretched over the calculus, but it would appear that the unevenness of the surface of the latter allowed the passage of urine. The ureter, shown in the specimen, is healthy.

From the body of a woman aged 64, who died in the Hospital in consequence of mitral stenosis. The urine, during the patient's residence in Hospital, contained stringy mucus and much albumen. "Some months" before death "a thick sort of jelly" had been noticed in it. Otherwise no indication of renal disease was given before death.

Post-Mortem and Case Book. 1879. No. 249.

3912. Renal Calculus in a Child. (Vesical Calculus.)

47 *c.* Both pelves are dilated, and the renal structure excavated by cavities in communication with them, presumably dilated infundibula. In both kidneys are contained masses of fusible calculus. The bladder, shown in the preparation, is filled by an uric-acid calculus, coated in places by mixed phosphate; and its walls are greatly thickened.

From the body of a child (male) aged 5, who died in the Hospital, having been admitted for the stone in the bladder, symptoms of which had been present for about a year.

Post-Mortem and Case Book. 1870. No. 327.

3913. Renal Calculus.

47 *b.* The pelvis is dilated, and the renal substance excavated by cavities communicating with it and presumably formed by dilatation of the infundibula. Both pelvis and cavities are filled with masses of mixed phosphatic (fusible) calculus. A good deal of renal tissue is left. The kidney is of about the normal size.

From the body of a lunatic in Hanwell Asylum.

Presented by Dr. DICKINSON.

3914. Renal Calculus.

47 a. The pelvis of the kidney is distended by an enormous mass of white calculus. The renal tissue is excavated by cavities of large size and irregular shape, embedding similar calculi, some of which are continuous with the mass in the pelvis. The whole organ is four or five times its natural size.

The calculi proved, on examination, to be "a mixture of the phosphates, in some places forming the friable calculus, in others with a preponderance of phosphate of lime" (Dr. Bence Jones).

From the body of a patient (age and sex not stated) who died of some disease unconnected with the kidneys, and was not known to have ever exhibited symptoms suggestive of renal disease. The urine had been tested during life, and found free from albumen. It was said to have shown a superabundance of lithic acid a few days before death.

A drawing of the preparation is shown in Series XXI.

Pathological Society's Transactions. Vol. x, p. 197.

Presented by Mr. HOLMES.

3915. Renal Calculus: Fatty Encroachment on the Kidney.

46 a. The left kidney is shown. The pelvis is occupied by a dark coloured calculus of irregular shape, set with sharp ridges; formed of phosphate and carbonate of lime. The walls of the pelvis are thickened, and are contracted on the stone. A mass of firm fat surrounds the kidney and the commencement of its ureter; and it has pressed into the hilus, replacing the renal structure and compressing the pelvis. Outside the fat is a coating of firm fibrous tissue, which possibly represents the capsule of the kidney, considerably thickened; the fat being, in this case, deposited between the organ and its capsule. The kidney is small in size, and section shows its infundibula dilated at the expense of the renal structure. In one of the dilated infundibula is a smaller calculus. The walls of the ureter are thickened.

From the body of a woman aged 31, who died in the Hospital of empyema, associated with abscess about the spleen, perforation of the diaphragm, and bronchial fistula. The urine never contained any pus, or more than a trace of albumen.

The opposite kidney was of normal size, but granular on the surface, with its capsule adherent. The heart was not hypertrophied.

Post-Mortem and Case Book. 1878. No. 202.

3916. Renal Calculus: Stricture of the Ureter: Dilatation of
9 a. the Kidney.

A multilocular cyst, with thin membranous walls that show little trace of renal tissue, represents the left kidney, the general shape of which it retains. It is lobulated externally; the lining is smooth. It weighs three ounces and a quarter. It contained, when removed, a pint of purulent fluid, and about forty very minute black calculi of oxalate of lime, which together did not weigh half a drachm.

The upper two inches of the ureter are dilated to the thickness of the finger. Beyond this is a constriction which in the fresh state did not admit a probe, though the fluid contents of the cyst passed scantily under pressure.

The right kidney was healthy.

From the body of a man aged 49. He had suffered for two years from intermittent passage of matter like pus in the urine. Constitutional symptoms appeared only six months before death.

Pathological Society's Transactions. Vol. xxi, p. 255.
Presented by Dr. DICKINSON.

3917. Renal Calculus.
47 d. The kidney shown, the right, has been converted into a chambered cyst, six or seven times the size of a normal kidney, with thick fibroid walls and partitions. Lithatic calculi are contained in the chambers and embedded in the septa. The cavities were, in the recent state, filled with thick greenish pus and crumbling calculous material. The organ is lobulated on the exterior; it was imbedded firmly in masses of thickened areolar tissue, from which it was with difficulty extracted. The whole formed a tumour, which extended from the iliac fossa to the under surface of the liver.

The pelvis and a portion of the ureter are shown. Both are greatly thickened and dilated; the former contains a large calculus. The whole of the ureter was in the same condition as the part shown. About halfway down it was blocked by some calculous material, and above that point was filled with pus similar to that in the kidney. The bladder was fasciculated, but no appearance of urethral obstruction was present.

From the body of a man aged 43, who died in the Hospital with œdema of the glottis and recent pleurisy. He was under observation for six days, but full examination was prevented by the presence of delirium tremens. The patient was said to have been troubled for a month

with frequent desire to micturate. He complained at times of pain in the abdomen. The urine passed in the Hospital contained a large but variable amount of pus.

Post-Mortem and Case Book. 1880. No. 38.

3918. Renal Calculus.

41 *a.* * An enormous dried membranous cyst, preserving to some extent the shape of a kidney. The lower part is lobulated externally, and divided by incomplete septa internally. The whole measures about twelve inches by six by five. In a jar by the side of the cyst are contained a calculus the size of a walnut, several others as large as peas, and a number of the size of mustard seed.

From the body of "an old man who had never known a day's illness", and had performed his duties regularly until a few days before his death, which occurred in October 1832. He was in the habit of taking much exercise, and from his peculiar walk and figure, it was inferred (but never known) that he had curvature of the spine laterally. A few days before his death, he was seen by the donor's father for the first time, and a large tumour was discovered in the abdomen. The patient could give no further account of it than that it had been there for many years, but that it had never given him any pain. No symptoms were present which might indicate the nature of the mass. It occupied the whole abdomen. Nothing occurred during the illness that threw any light on the disease. At the autopsy, on opening the parietes, an immense tumour presented itself, which proved to be one of the kidneys. It contained a large number of calculi (some are shown with the specimen); some dozens of a bean-shape, and thousands of small black ones. The ureter was completely obliterated, and the sac contained some offensive fluid. The opposite kidney was perfectly natural.

Presented by Mr. JOHN MERRIMAN, who furnished the above history.

3919. Dilatation of the Pelvis of the Kidney.

53 *a.* The pelvis is dilated into a large sac about the size of a turkey's egg, which projects from the hilus of the kidney (the right). The ureter is healthy. The infundibula are not dilated. The surface of the kidney is granular, but the cortex is not materially thinned.

From the body of a woman aged 38, who died in the Hospital. The symptoms were those of chronic renal disease, following a subacute attack.

The left kidney was of large size, weighing eight ounces; its surface granular, its cortex thinned. Both kidneys were abnormally movable. The left ventricle of the heart was hypertrophied. Nothing was found to account for the condition of the pelvis shown in the preparation.

Post-Mortem and Case Book. 1877. No. 81.

3920. Abscess of the Pelvis of the Kidney: Rupture.
70. The pelvis and infundibula of the left kidney are dilated to form an abscess cavity as large as a child's head. A flattened layer of renal tissue remains on one side of the sac. The ureter is healthy, and its pelvic orifice admits the passage of a large probe. At the lower and back part of the abscess-cavity is a ragged opening, which communicated with a collection of fœtid pus beneath the peritoneum of the left lumbar region. Within the abscess-cavity only a small amount of similar pus was found. The peritoneum was universally injected, and coated with lymph. No trace of a calculus was found.

The bladder and right ureter, shown in the preparation, are healthy; as was also the right kidney.

The patient, a woman aged 35, was admitted into the Hospital with peritonitis, in an almost moribund state. The illness had commenced fourteen days previously with the sudden onset of pain in the left side of the abdomen. She had suffered occasionally from pain in that region for several months. Death ensued in three days. The urine was not examined.

The lungs were the seat of advanced interstitial pneumonia.

Post-Mortem and Case Book. 1871. No. 275.

3921. Cystic Degeneration of the Kidney, from cause unknown.
16 *b*. Both kidneys are shown. The left is converted into a series of cysts, with thin membranous walls and partitions. When opened, they were found to be filled with creamy pus. The right is enlarged—it weighs eight ounces—but not abnormal in structure.

From the body of a man aged 48, who was admitted into the Hospital in a comatose condition, and died in thirty-six hours. The attack was said to be of gradual onset, and to have commenced with "forgetfulness"; followed by left hemiplegia. Atheroma of the basic arteries, slight thickening of the arachnoid, and excess of ventricular fluid, were the only lesions found in the ence-

phalon. The heart was hypertrophied, and weighed fifteen ounces.

Post-Mortem and Case Book. 1876. No. 151.

3922. 37 c. Compression of the Pelvis of the Kidney by Carcinomatous Glands.

A large mass of carcinoma, developed from the lumbar glands, partly surrounds the left kidney. A portion of the mass has forced itself into the hilus, and has nearly obliterated, by compression, the cavity of the pelvis. The urinary passage, however, remains pervious from the calices to the bladder. The renal structure is unaffected, except that a few cysts appear near the surface. The capsule is thickened.

From the body of a man aged 34, who died in the Hospital. The tumour seen was secondary to a carcinomatous growth developed in the left testicle, which had been removed by operation.

Post-Mortem and Case Book. 1877. No. 53.

3923. 37 b. Encephaloid Carcinoma of the Kidney.

Nodules of encephaloid carcinoma appear, on section, in various parts of the renal tissue. From the lower end of the organ grows a fungating mass. The hilus is blocked by a mass of glands affected with carcinoma and greatly enlarged.

The dorsal vertebræ and the spinal cord were also affected by carcinoma.

From the same case as No. 3762.

No further reference.

3924. 37 a. Encephaloid Carcinoma of the Kidney, in Infancy.

A mass, weighing two pounds, of encephaloid carcinoma, with the kidney attached at its lower border; the whole enclosed in a continuous capsule. The tumour has grown from the upper and anterior part of the kidney. Some extravasations of blood have taken place into it.

From the body of a child aged 13 months (sex not stated). The child appeared well till it was six months old. The belly was then noticed to be enlarged. After six months more, a tumour was detected in the right side of the abdomen. The child died comatose on March 28, 1871, after three days of convulsions and vomiting.

Presented by Dr. DICKINSON.

3925. Encephaloid Carcinoma of the Kidney.

34 *a.* The kidney shown, the left, is five or six times the natural size, and nodulated on the exterior. The section shows a coarse reticulum of flattened fibrous bands, in connection with the walls of the infundibula internally, with the thickened capsule externally. The meshes of the reticulum are packed with a crumbling material, which, in the fresh state, appeared semi-gelatinous. A fungating mass projects into and blocks up the pelvis. In the upper part of the organ appear three or four circumscribed nodules, which showed under the microscope the characters of encephaloid carcinoma. The semi-gelatinous material showed cancer-cells and epithelium, but no uriniferous tubes.

From the body of a man aged 48, who died in the Hospital with carcinoma of the lungs and the lumbar glands, as well as of the left kidney. The right kidney was unaffected.

The history was obscure, and the patient, on admission, was too ill for efficient examination.

Post-Mortem and Case Book. 1868. No. 96.

3926. Sarcoma of the Kidney.

66. The kidney shown is considerably larger than normal. Its surface is studded with small elevations, round, flattened, and conical, situated immediately beneath the capsule. In the recent state, they resembled extravasated blood to the naked eye.

From the body of a woman aged 43, who died in the Hospital of bronchitis.

Under the microscope the tumours present the characters of small round-celled sarcoma. They were originally believed to be of lymphadenomatous nature, but further examination satisfied Dr. Whipham of their sarcomatous character. Extravasations of blood occur in all parts.

Similar growths occurred in the uterus.

Post-Mortem and Case Book. 1870. No. 77. *Path. Soc. Trans.* Vol. xxiii, p. 166.

3927. Spindle-Celled Sarcoma of the Kidney.

41 *b.* A tumour about the size of an ostrich egg grows from the outer border of the kidney. Microscopic examination shows it to be a spindle-celled sarcoma.

From a case in the practice of Dr. Dickinson, who furnishes the following account.

"A gentleman of spare frame, and with a sallow com-

plexion, began, at the age of 47, to suffer with pain in the loins and down the ureter, occasional hæmaturia, and the passage of renal calculi, generally of about the size of shot, of which about a hundred escaped, at first with the symptoms which have been mentioned, latterly without blood or pain. There remained, however, more or less constantly, dull pain or sense of weight about the left lumbar region; and he had occasional attacks of hæmaturia after riding or other active exercise.

"At the age of 55 some loss of flesh and of general health, together with an increase of pain in the left lumbar region, drew fresh attention to his condition. There was then found (in the autumn of 1867) slight increase of resistance to pressure, and slight diminution of resonance on percussion, in the abdomen at the left side of the umbilicus, in front, as was judged, of the left kidney. Nothing amiss could be detected in the loin. The urine was albuminous, coagulating to a tenth. Specific gravity 1019. Under the microscope no casts could be found, but much mucus and numerous crystals of oxalate of lime. A calculus which had been formerly passed, was now obtained for examination, and found to consist chiefly of the same substance. The pulse had the rate of 68. The tongue was somewhat coated, and the patient complained of indigestion and 'acidity'.

"The patient was now treated medicinally and dietetically in view of renal calculus, and he visited towards the same end several continental baths. Rather less than three years later (March 10, 1870) he came back looking haggard, thin, and more sallow, even to a slightly bronzed tint, which, however, was not more than might possibly have been accounted for by his exposure to sun and air. The localised fulness at the left side of the navel was more decided, the lumbar pains still dull and heavy, but more persistent than formerly. The bowels were confined; the urine as before. The pain next (March 18) began to be increased by movement; soon so much so that he could only crawl up a few stairs, and that with growing difficulty, so that he became virtually confined to bed. There were now some slight twinges in the line of the ureter and in the left testicle, which was somewhat retracted, but the most severe pain was behind, near the junction of the sacrum with the ilium.

"The next change to be recorded (March 21) was the abrupt discontinuance of the discharge of albumen and mucus with the urine, that secretion resuming in all respects the characters of health. At about the same time

the pulse became quickened, and the aspect and temperature febrile, the thermometer indicating 99° and 102° as the limits of variation between morning and evening. This febrile condition lasted for about a fortnight and then somewhat abated, but even up to the time of death it had not wholly disappeared.

"The fulness which has been mentioned as evident in the abdomen in the left hypochondriac and umbilical regions was now (March 26) more marked, and on deep pressure a swelling could be distinctly appreciated at the back of the abdominal cavity; apparently in the renal region.

"On the 3rd of April the patient could not pass water; on the introduction of a catheter it was found that the bladder made no expulsive effort, and that, in short, the retention was due to paralysis. From this time no urine was passed excepting with the catheter, what was thus withdrawn soon presenting itself as ammoniacal, and mixed with ropy mucus.

"Almost simultaneously with the paralysis of the bladder the sphincter ani lost its power, so that the motions were passed without control, and almost unconsciously.

"The left leg (April 4) almost immediately afterwards became abnormally sensitive, then by almost imperceptible degrees lost motor power, and finally, though not until much later, its sensibility. The right leg began a week later to follow exactly the same course, so that by the middle of April complete paraplegia existed.

"Bed-sores in the meanwhile were forming and spreading. The difficulty with which the patient was moved prevented a satisfactory examination of the spine, but as far as could be ascertained this structure was free from tenderness, nor was it the seat of pain.

"The last symptom to be recorded before the final process of sinking set in was the occurrence of violent brief attacks of spasmodic dyspnœa, coming on suddenly, and as suddenly ceasing. Nothing abnormal was detected with the stethoscope. The patient died exhausted, but perfectly conscious, on the 8th of May 1870, a few days after he had become liable to these paroxysms."

Presented by Dr. Dickinson.

3928. Lymphadenoma of the Kidney.

68. The kidney is considerably larger than normal. Nodules of morbid growth, about the size of a marble, appear on the surface. Similar tumours are seen in the deeper por-

tions, on section. Under the microscope, they show small cells of tolerably uniform size, but of various shapes, embedded in a delicate interlacing stroma.

From the same case as No. 3823.

3929. Tubercle of the Kidney.

30 *a.* The organ is considerably larger than natural. The pelvis and infundibula are greatly dilated, and their walls thickened. The renal structure is thickly studded with caseous masses, many of which have broken down in the centre.

From the body of a man aged 38, who died in the Hospital with caries of the vertebræ, double psoas abscess, and tuberculosis of the lungs, in addition to that of the kidneys and urinary tract.

A drawing of the kidney is shown in Series XXI (*v. infra*).

Post-Mortem and Case Book. 1869. No. 240.

3930. Tubercle of the Kidney; giving rise to Psoas Abscess.

16 *a.* The kidney shown (the left) is converted into a mere cyst with thick fibroid walls, divided into compartments by partitions of similar character. The form of the kidney is preserved, but its size is increased, the cyst measuring about five inches and a half by five inches and a half. The inner surfaces of the compartments are honeycombed, and coated by thick layers of caseous material. The rest of their cavity was filled, when the kidney was removed, by thick pus.

Two of the compartments, near the lower border of the organ, open externally by perforation of the outer wall. The larger of these openings is round, and about the size of a sixpence; its edges are well defined. It communicated with an abscess that ran down in the substance of the psoas muscle, and opened in the left groin.

The patient, from whose body the specimen was taken, a man aged 22, had been in the Hospital for nearly a year with the psoas abscess, which was considered to be due to caries of the spine. The case accordingly attracted little attention, and no very detailed records were made. The bodies of two or three of the lower dorsal vertebræ really were carious, but the disease was confined to their right side, and was in no way connected with the psoas abscess. The lungs were tubercular; the liver, spleen, intestines, mesenteric glands, and right kidney, lardaceous.

Pathological Society's Transactions. Vol. xvi, p. 175.

3931. Tubercle of the Kidney: Advanced Stage.

29 a. The kidney shown (the left) is nearly double the natural size, and lobulated on the surface. Its interior is hollowed out into a series of cavities, bounded by thick fibroid walls, which present a ragged surface inwardly. The wall of the ureter is thickened, and ragged on its inner surface also. In the recent state, the ragged surfaces were thickly coated with caseous material; the ureter was thereby completely blocked. The cavities in the kidney were filled with clear fluid, mixed with puriform matters. The whole organ weighed twelve ounces.

From the body of a man aged 37, who died in the Hospital with caries of the vertebræ and psoas abscess, necrosis of the ilium, tuberculosis of the lungs and bladder, and lardaceous infiltration of the liver, spleen, and intestines, in addition to the lesions shown in the preparation. The right kidney weighed eight ounces. It was slightly granular, but unaffected by tubercle. The patient was moribund on admission.

Post-Mortem and Case Book. 1880. No. 25.

3932. Enormous Cyst, Developed from the Pelvis of the Kidney.

23 a. From the posterior wall of the pelvis of the kidney shown (the right) is developed an enormous cyst, capable of holding nearly four pints. It lies behind the kidney, and in the body it filled the whole of the right side of the abdomen, pushing the kidney forwards and the intestines to the left. The ureter runs in front of, and is adherent to it. The upper end of the ureter is in direct communication with it.

A secondary cyst, holding about half a pint, opens from the upper end of the larger one, and lies between the kidney and the suprarenal capsule, separating them by about three inches' space.

The wall of the cyst varies from a thickness of one-sixteenth of an inch to extreme tenuity. It is smooth internally. The contents were a clear yellowish fluid, strongly alkaline, and highly albuminous.

The ureter is patent throughout.

The patient, from whose body the specimen was taken, a woman aged 37, had never perceived the tumour in the abdomen till she was knocked down by a cab, three weeks before her death. Slight pain then called her attention to it. She was in the Hospital in consequence for six days before her death, which occurred suddenly from fatty degeneration of the heart. Besides the pain and general malaise, no symptoms are recorded.

A multilocular cyst, the size of an orange, filled with clear, structureless, gelatinous matter, was found attached to the sheath of the tendon of the right gracilis muscle, near its insertion.

Post-Mortem and Case Book. 1870. No. 167.

3933. Multiple Cysts of the Kidney.

24 *a.* The kidney shown is of about three times its natural size, but contains little normal tissue, being riddled throughout by cysts of all sizes up to that of a walnut. The cysts are lined by thin smooth membrane. A few were found to contain pus, but most of them were filled with a clear yellow fluid. They project on the surface of the organ, and, when full, they gave it a lobulated appearance. Both kidneys were similarly affected, and together they weighed forty ounces.

From the body of a patient aged 45, who died in the Hospital. The symptoms were of six months' date, and comprised cramps, anorexia, vomiting, and general cachexia. Death was preceded by an epileptiform attack.

The urine was abundant, but of low specific gravity, and highly albuminous. It contained much pus, and a few granular casts. The urethra was found after death to be slightly contracted just in front of the bulb, but no symptoms of stricture had ever occurred. The bladder was small, with thickened walls; the ureters natural. The left ventricle of the heart was hypertrophied.

Post-Mortem and Case Book. 1867. No. 134.

3934. Multiple Cysts of the Kidneys.

24 *b.* The kidneys are five or six times their normal size; but very little of their true structure is left, their whole bulk being occupied by cysts of all sizes up to that of a large marble. The cysts are lined by thin smooth membrane, which, in some cases, is folded inwards to form partial dissepiments. They project on the surface of the organs. They were found to contain clear fluid, and in some cases, crumbling calculous fragments. In the recent state they weighed together eighty-one ounces.

Microscopic examination of the scanty remains of renal tissue showed an advanced degree of fibrosis.

From the body of a man aged 48, who was admitted into the Hospital with bronchitis of a month's date; and died five days later, after an hour's urgent dyspnœa. The urine was pale and clear, and contained a considerable amount of albumen.

Post-Mortem and Case Book. 1868. No. 374. *Path. Soc. Trans.* Vol. xxi, p. 244.

3935. Chyluria.

75. A round flat cake of fibrinous material measuring six inches in diameter.

From the urine of a patient suffering from chyluria. The contents of the vessel, a few hours after passage of blood-stained creamy urine, were found to have become solidified into a pink translucent mass. In the recent state, it measured seven inches in diameter, and half an inch in thickness.

Medical Cases. 1877. No. 739. *Path. Soc. Trans.* Vol. xxix, p. 391.

XII.

DISEASES OF THE BLADDER, URETHRA, AND PROSTATE GLAND.

3936. Wound of the Bladder.

4 *a.* A portion of the wall of the bladder, from the anterior and upper regions. In it appears a perforation about large enough to admit a crow-quill. The edges of the perforation are thin, and bevelled from the external surface. Some puckering of the wall is visible on the external surface, just around the wound.

From the body of an unmarried woman aged 22, who died on August 23, 1877, under the following circumstances. She was nearly four months advanced in pregnancy. Up to August 22, she had been in perfect health; but at 9 A.M. on the 23rd she was found in a state of collapse, from which she never rallied; death ensuing at 3 P.M.

A pint of straw-coloured fluid, possessing an urinous smell, was found in the peritoneal cavity at the *post-mortem* examination, forty-eight hours after death. No wound was to be seen in the abdominal wall. The vulva and the urethral orifice were quite natural, and the membranes of the fœtus unruptured. All the other organs were healthy. It was concluded that a pointed instrument had reached the internal surface of the bladder, after careful introduction through the urethra.

Presented by Mr. WILLIAM LEIGH.

3937. Stricture of the Anterior End of the Urethra.

50 *a.* The fossa navicularis is in a healthy state, but ends

blindly. It has become lengthened owing to the introduction of catheters. The urethra opens in the left wall of the fossa by a valvular orifice an eighth of an inch wide, which the introduction of a catheter must inevitably have closed. For half an inch from this opening the urethra is narrowed to the diameter of a stout bristle. A second stricture existed in the membranous portion.

From the body of a man aged 34, who died in the Hospital in consequence of retention of urine. Catheters could be introduced only for three-quarters of an inch, *i.e.*, into the blind pouch described above.

Post-Mortem and Case Book. 1877. No. 214.

3938. Stricture of the Urethra, shown in Transverse Section.

56 *a*. The stricture is in the bulbous portion of the urethra. A transverse section of the penis has been made just in front, and again just behind it. The urethra behind the stricture is seen to be dilated. The change in the calibre of the tube is very sudden.

From the body of a man who died in the Hospital of phthisis. The stricture had existed for twenty years.

Post-Mortem and Case Book. 1866. No. 184.

3939. Vesico-Intestinal Fistula.

43 *a*. In the front of the preparation is shown the bladder, cut open from above; at the back, the rectum, the sigmoid flexure, and the lower end of the descending colon. A rod is inserted into the urethra.

The lower part of the posterior wall of the bladder is firmly adherent to that of the sigmoid flexure, and the united walls are perforated by a fistulous opening the size of a large quill. The edges of the opening are smooth and rounded. Some patches of ulceration are seen on the base of the bladder, and a very little phosphatic crust.

For about an inch above the fistula, the bowel, being adherent to the bladder, is somewhat narrowed in calibre. For an inch and a half below, its walls are thickened by cicatricial tissue, and its canal constricted to such an extent as only to admit the little finger. The rectum is greatly dilated.

From the body of a man aged 55, a patient under Mr. Charles Hawkins. Rather more than four years before his death he commenced, without other symptoms, to pass fæcal matter by the urethra. After about twelve months, indications of a calculus in the bladder appeared; and a little later the passage of fæces in the urine ceased.

Two years and four months after the first symptoms, Mr. Charles Hawkins commenced the removal of the stone by means of lithotrity. After seven operations, spread over a period of six months, the bladder was completely cleared of calculous matter; and, the patient being directed to wash the viscus out daily, none again formed.

Upon the fourth operation, the urethra became temporarily blocked for about thirty-six hours. The urine, after some twelve hours' retention, found its way into the rectum, and continued to pass by the anus till the natural passage was freed. Small quantities continued to find an exit with the fæces as long as the patient was under Mr. Hawkins' observation, and fæces were on a few subsequent occasions noticed in the urine. Otherwise the patient experienced no inconvenience till an illness, unconnected with the urinary organs, put an end to his life, a year and two months after the bladder had been pronounced free from stone.

The calculous matter removed was sufficient to fill a three or four ounce bottle. It was formed of triple-phosphate, on a nucleus apparently of fæcal origin. None was found in the bladder after death.

Medico-Chir. Soc. Trans. Vol. xli, p. 441; vol. xlii, p. 423.

Presented by Mr. CHARLES HAWKINS.

3940. Vesico-Vaginal Fistula.
45 *a.* The adjacent portions of the bladder and vagina are shown. They are adherent over an area the size of a sixpence just below the os uteri. In the centre of this area is a round smooth-edged aperture the size of a quill, which places the two cavities in communication. It pierces the bladder about half an inch above the orifice of the urethra. In the fresh state, a cicatrix could be traced downwards for an inch and a half from the aperture on the mucous surface of the bladder.

From the body of a woman aged 64, who died in the Hospital of pneumonia. The fistula had existed for eleven years. Operation had been attempted three times. Much pain was experienced in the vagina, and the vulva was covered with a thick phosphatic deposit.

Post-Mortem and Case Book. 1864. No. 217.

3941. Perforation of the Posterior Wall of the Bladder by the
6 *a.* Continued Pressure of a Catheter.

The bladder, which is greatly hypertrophied, is shown, cut open. A wide groove of ulceration runs up the pos-

terior wall, terminating in a perforation near the apex. A bougie is passed through the perforation.

From the body of a man aged 34, on whom perineal section was performed for the relief of old-standing stricture. A silver catheter was tied in the bladder. Two days after the operation symptoms of peritonitis set in, and the patient died on the third.

Post-Mortem and Case Book. 1872. No. 203.

3942. Vesical Calculus.

119. The bladder, ureters, and kidneys are shown. The bladder is dilated, and hypertrophied. It is entirely filled by a huge lithic-acid calculus, weighing three thousand six hundred and twenty grains. The mucous surface of the bladder is ulcerated throughout, except at the base, where it was found adherent to the stone. The ureters are dilated. The kidneys are enlarged, and reduced almost entirely to mere collections of cysts, by dilatation of the pelves and infundibula at the expense of the renal substance.

From the body of a man aged 43, who died in the Hospital after an unsuccessful attempt to extract the stone. Symptoms of calculus had been present for eight or nine years.

Post-Mortem and Case Book. 1874. No. 31.

3943. Suprapubic Lithotomy.

106 *a*. The bladder and ureters are shown with the calculus. The latter weighs a hundred and two grains and a half. The walls of the bladder are hypertrophied. In its anterior wall appears a vertical wound three-quarters of an inch in length, with ragged sloughy edges. The ureters are much dilated.

The operation was performed in the Hospital by Mr. Rouse on February 15, 1872. The patient was a ricketty child of the male sex, aged a year and ten months. The pelvis was unduly small. Lithotomy had been unsuccessfully attempted ten months previously. Much difficulty was experienced in opening the bladder above the pubes, owing to the small space that intervened below the reflected peritoneum. The suprapubic ligament was divided, and the symphysis partly separated. The child died of peritonitis on the fifth day.

Post-Mortem and Case Book. 1872. No. 45.

3944. Papilloma of the Bladder.

113 *a*. A circular patch of papillomatous growths, about the

size of a crown piece, is seen on the base and left wall of the bladder. The tissue of the papillæ is soft and spongy. They are not covered by any distinct epithelial layer, as seen in microscopic section. A thick layer of connective tissue intervenes between their bases and the muscular fibres of the vesical wall.

From the body of a man aged 60, who died in the Hospital with hæmorrhage from the bladder of two months' duration. An attack of hæmaturia was reported as having taken place eight or nine years before.

Post-Mortem and Case Book. 1875. No. 189.

3945. Carcinoma of the Bladder.

22 *a*. The bladder cut open from the front to display the interior. The base and part of the back and left side are the seat of fungoid ulceration. Nodular protuberances are seen on the exterior in the corresponding region. The orifice of the left ureter is completely, that of the right partially, obliterated. The carcinomatous nature of the lesion was established by microscopic examination.

From the body of a man aged 61, who died in the Hospital. Sediment began to appear in the urine about ten weeks before death. Frequent desire of micturition, and recurrence of micturition after the bladder had appeared to be empty, commenced about the same time. Pain in the act of micturition and occasional retention also. He was admitted with retention twenty-five days before death. The catheter drew off almost pure blood, mixed with pus. Hæmorrhage continued more or less, and the patient sank.

Post-Mortem and Case Book. 1869. No. 270.

3946. Fragments of a Carcinomatous Growth, Passed by the

117. Urethra.

Pathological Society's Transactions. Vol. xx, p. 233.

Presented by Dr. DICKINSON.

3947. Scirrhus of the Prostate and Bladder.

120. The prostate is greatly enlarged by infiltration with scirrhus, which has extended into the muscular coat of the lower half of the bladder, raising the mucous membrane into irregular nodules.

From the body of a man aged 34, who died in the Hospital, owing to retention of urine. Obstruction to its passage had been experienced for three months.

Post-Mortem and Case Book. 1875. No. 179.

3948. Tubercle of the Bladder.

18 *a*. The bladder is shown, cut open. Its internal surface is studded over with a number of little conical elevations, some of which are ulcerated at the tip. They are found to be produced by development of tubercle in the submucous tissue. In the recent state, the mucous membrane covering them was very vascular, and of a bright red colour.

From the body of a man aged 24, who died in the Hospital, of phthisis. The right ureter and kidney were in an advanced stage of tuberculous disease, the left kidney infiltrated with lardaceous material. The patient was admitted in a moribund condition. Very few clinical details were ascertained, and the urine was not examined.

Post-Mortem and Case Book. 1867. No. 303.

XIII.

DISEASES OF THE MALE ORGANS OF GENERATION.

3949. Malformation.

100. The parts at first sight appear to be those of a female child, in whom the clitoris is much enlarged. They consist of two large and well formed labia, with a cleft or fissure between them, large enough to admit the little finger, ending in a *cul-de-sac.* At the upper part of the cleft is a rudimentary penis, consisting merely of a diminutive glans, which is partly hidden by a superabundant prepuce.

The labia, above referred to, are really the two halves of the scrotum, separated from each other by the central cleft. On looking at the preparation from behind it will be seen that each contains a sac lined by a well-defined serous membrane, apparently the tunica vaginalis. The sacs do not, however, contain testicles. There is no meatus urinarius at the extremity of the glans, but the penis is grooved on its under surface, and the groove leads backwards into the bladder.

From the body of a still-born infant.

Presented by Mr. G. A. NORMAN.

3950. The Pubic Region of an Eunuch.

a. A clean sweep has been made of the external genitalia, leaving a longitudinal cicatrix closely adherent to the

bone. The orifice of the urethra is at the upper end of the cicatrix, and the appearance is altogether something that of the labia majora of the female.

From the body of a Mahommedan Indian aged about 60. He had been chief of a gang of eunuchs in the districts of Patna and Monghyr, in the Presidency of Bengal, and was sentenced to a long term of imprisonment by the sessions judge of Bhaugulpore for emasculating young male Mahommedans. He died in Monghyr gaol in 1863.

Pathological Society's Transactions. Vol. xvii, p. 184.

Presented by Dr. THEODORE DUKA.

3951. Hypertrophy of the Prepuce: Removal.
2 a. The operation was performed by Mr. Pollock, on June 9, 1870, in the case of a boy aged 12. The prepuce extended about two inches beyond the penis, and had been enlarged as long as the patient remembered. On June 21 he was discharged, with the wound healed.

The prepuce, as removed, is shown in the preparation.

Surgical Cases. 1870. No. 855.

3952. Melanotic Spindle-celled Sarcoma of the Penis: Amputation.
10 a.

The distal half of the penis amputated; the urethra slit open. A mass of melanotic growth is seen around the meatus urinarius, and smaller detached masses of similar character spring from the lining membrane of the last inch or so of the urethra.

Removed from a man aged 52, by Mr. Holmes, on February 8, 1872. The growth had been eight years in development. The patient made a good recovery.

Microscopically, the growth presents the appearance of spindle-celled sarcoma, the cells being filled with brownish-black granular pigment.

Surgical Cases. 1872. No. 179. *Path. Soc. Trans.* Vol. xxiii, p. 175.

3953. Sebaceous Accumulations behind the Corona Glandis.
2 b. Glistening white masses are seen behind the corona. Under the microscope they show epithelial scales and plates of cholesterin.

From the body of a child aged 2, who died with general dropsy, apparently due to renal disease. Slight phimosis existed.

Post-Mortem and Case Book. 1879. No. 191.

3954. Milky Fluid Removed from a Hydrocele by Tapping.

31 *a*. Mr. J. A. Wanklyn reports as follows on its composition :—" Specific gravity, at 20.5° Centigrade, 1.0167. 100 cubic centimètres (or 101.67 grammes) contain :— fat, 1.52 grammes; albuminous substance, 6.22 grammes; ash, mainly chloride of sodium, 0.84 grammes; total, 8.58 grammes. It is almost absolutely free from urea, inasmuch as the alcoholic extract, after the removal of the fat, was only 1.04 gramme per 100 cubic centimètres. The albuminous substance differs from common albumen."

Presented by Mr. POLLOCK, September 1877.

3955. Calcified Sac of a Hydrocele.

Removed from a Hindu by Dr. Theodore Duka. The hydrocele was of many years' standing. It had suppurated, and a discharging sinus was left. A probe, inserted into the sinus, came into contact with calcareous material. Dr. Duka excised the whole sac, which was infiltrated with similar material. The patient made a good recovery.

Presented by Dr. THEODORE DUKA.

3956. Hydrocele: Operation for Radical Cure.

93 *a*. A section of the testis and its coverings has been made, showing the layers of the tunica vaginalis uniformly united by adhesions of soft lymph. There is no trace of suppuration in the sac, or around the testis.

From the body of a man aged 59, who underwent an operation for the radical cure of a hydrocele of four years' standing. The operation consisted in the introduction of silver wire into the sac. It produced so much pain that the wire was withdrawn at the end of forty-eight hours. Severe inflammation followed, giving rise to an abscess in the groin, which burrowed into the perinæum, causing retention of urine, made its way into the urethra, and thence into the bladder; and proved the cause of death eight weeks after the operation.

Post-Mortem and Case Book. 1865. No. 342.

3957. Syphilitic Disease of the Testicle.

102. The organ (the left) weighs six ounces. Its proper structure is entirely replaced by gummatous tissue. In the upper part is a cyst of about two drachms' capacity, which in the recent state contained decolorised fibrin and recent coagulum.

From the body of a man aged 42, who died in the Hospital with a compound fracture of the leg. Depressed

scars were found on the glans penis. The right testicle was similarly affected, and weighed eight ounces.

Post-Mortem and Case Book. 1872. No. 184.

3958. Tubercle of the Testicle: Early Stage: Removal.

45 *a*. The testicle, as removed, is shown, cut open. It is somewhat larger than the normal. In its centre is a nodule of morbid growth, the size of a pea. At its upper part, it is clothed externally by a thick deposit of similar material.

Removed by Mr. Holmes in March 1878. A drawing of the specimen in the fresh state is shown in Series XXI (*v. infra*).

Microscopically, the morbid growths showed accumulations of small cells, with a faint reticulum. Here and there caseation was proceeding. No giant-cells were met with.

Presented by Mr. HOLMES.

3959. Fibroma of the Tunica Albuginea.

101. The tumour is as large as a small coco-nut; it is lobulated on the surface. It grows from the tunica albuginea, the secreting structure of the testis remaining unchanged. The section shows numerous opaque white bands arranged in various curves in an uniform greyish matrix. Microscopically, wavy fibrous tissue is seen, for the most part well developed.

Removed from a man aged 81, in the Hospital, by Mr. H. Lee, June 29, 1871. The enlargement of the testis was of eight years' date. The inconvenience produced by the weight, and a dragging sensation along the cord, were the only symptoms. The operation was performed at the patient's desire. The wound sloughed, and death ensued on the ninth day.

Pathological Society's Transactions. Vol. xxiii, p. 168.

3960. Carcinoma of the Testis.

89 *a*. A section of a mass of encephaloid carcinoma, as large as an ostrich-egg, irregularly ovoid, nodulated on the surface, surrounded by a firm fibrous capsule. Some small cysts appear in the middle of the mass. No trace of the testis is discernible.

Removed from a man aged 39, by Mr. Prescott Hewett, November 22, 1868. The enlargement of the testis was of about two years' date. The patient made a good recovery.

Surgical Cases. 1868. No. 1677.

3961. Cystic Chondro-Carcinoma of the Testis.

87 *a*. The testis shown, the left, is about the size of a lemon. To the naked eye, the section presents nothing but a series of cysts, varying in size from a pin's head to a pea, separated by fibroid tissue. The lining of the cysts is smooth. In the fresh state they contained, some a mucoid, some a soft granular material. The whole is surrounded by a connective-tissue capsule.

Under the microscope, the contents of the cysts shows either soft granular *débris*, or masses of large, irregular, nucleated cells. The intercystic material consists, for the most part, of dense fibroid tissue. Here and there are seen minute patches of cartilage, and here and there a fibrous network, enclosing collections of large epithelioid cells in its meshes.

From the body of a man aged 30, who died in the Hospital. The disease was of two and a half years' growth. The lymphatic glands of the left inguinal, pelvic, and lumbar regions were infiltrated with encephaloid carcinoma. Nodules of similar character existed in the lungs.

Post-Mortem and Case Book. 1876. No. 4. *Path. Soc. Trans.* Vol. xxviii, p. 177.

XIV.

DISEASES OF THE FEMALE ORGANS OF GENERATION.

3962. Congenital Absence of the Uterus.

163. The pelvic viscera, with the vulva and perinæum, are shown. The rectum and bladder are natural. Ovaries of normal size and structure exist; in the right is a recent corpus luteum. The uterus is represented only by some nodules of condensed fibrous tissue in the fold of peritoneum between the bladder and rectum. The labia majora are less developed than natural. They enclose a small depression, capable of holding less than one drachm. In the middle of this depression is the orifice of the urethra. A minute pouch, or *cul-de-sac*, just behind the meatus, is the only trace of a vagina. It has no communication with the interior of the pelvis.

From the body of a girl aged 18, who died in the Hospital of disease of the heart-valves. Vicarious menstruation had occurred three or four times during as many months preceding death, in the form of hæmorrhage from the nose and gums, with lumbar and dorsal pain, lasting for about a week, and recurring at monthly intervals. A purpuric condition was present for four or five weeks before death.

Post-Mortem and Case Book. 1872. No. 140.

3963. Uterus Bicornis.

107 *a*. The cornua of the fundus are completely distinct, and are placed nearly at right angles to the axis of the common cervix into which they open.

From the body of a woman aged 24, who died in the Hospital, of endocarditis. The catamenia had always been regular, of six days' duration, but attended by much pain in the back. She had been married seven years, but had borne no children till about seven months before her death, when she was delivered of a stillborn infant by instrumental aid. Power and sensation were lost in both legs for half an hour after, and aching pains persisted in the limbs for several weeks. Thenceforth, the cardiac symptoms, which had commenced during pregnancy, were exacerbated.

Post-Mortem and Case Book. 1878. No. 379.

3964. Recto-Vaginal Fistula: Laceration of the Left Labium Majus.

162. Between the vagina and the lower part of the rectum is seen an aperture of communication, large enough to admit two fingers with ease. An extensive laceration is seen in the left labium majus, through which a finger can be passed into the vagina.

From the body of a woman aged 22, who died in the Hospital. The injuries were inflicted during a first parturition, sixty-seven days before death. The labour was severe, but instrumental aid was not resorted to. Much suffering was occasioned by the lodging of fæces in the vagina, and, eight days before death, a band which extended across the rectum was divided, in order to give them free exit. Fatal peritonitis set in two days later.

Post-Mortem and Case Book. 1870. No. 34.

3965. Rupture of the Uterus during the Process of Turning.

164. A rent nearly six inches in length appears in the wall of the enlarged uterus, which is emptied of its contents.

No reference.

3966. Inversion of the Uterus: Successful Amputation.

1 *a.* The amputated uterus is shown, laid open. It is of the size of a Jargonelle pear. The extremities of the Fallopian tubes and of the round ligaments are drawn into the inverted cavity.

The operation was performed by Dr. Barnes, in May 1879, on a woman aged 47. The tumour formed by the uterus was found in the vagina eighteen months after the removal of a large fibro-myoma. The patient had suffered much from metrorrhagia and offensive watery discharges, and was very prostrate. The tumour being taken for an uterine fibroid, a wire was passed around its base. The true nature of the mass was suspected in consequence of the pain caused by tightening the wire, and verified by further examination. Ablation was, however, proceeded with as offering a better chance of recovery in the patient's condition than sustained elastic pressure. Free hæmorrhage followed, but was checked by the application of iodine tincture. All unfavourable symptoms subsided after the first week. The wound cicatrised in about six weeks' time, and the patient recovered completely.

British Medical Journal. 1879. Vol. ii, p. 359.

Presented by Dr. BARNES.

3967. Hypertrophy of the Clitoris.

143 *a.* The clitoris shown is four inches in length and about four inches in circumference. Its extremity is expanded into a number of bulbous outgrowths, which give it a racemose form.

From the body of a woman aged 48, who died in the Hospital with carcinoma of the breast and internal organs. The clitoris appears to be enlarged by overgrowth of its normal structures, and contains no carcinomatous tissue.

Post-Mortem and Case Book. 1869. No. 264.

3968. Fibroid Tumour of the Uterus.

19 *a.* The tumour is of the size of a coco-nut. It is imbedded in the posterior wall of the uterus, the muscular fibres of which are expanded over it. A similar tumour, the size of a Tangerine orange, is embedded in the anterior wall. The cavity of an abscess is seen between the vagina and the bladder.

From the body of a woman aged 40, who died in the Hospital of peritonitis resulting from the abscess. The weight of the tumour had caused retroversion of the

uterus, and its mass had pressed upon, and given rise to serious obstruction of, both ureters.

Post-Mortem and Case Book. 1870. No. 342.

3969. Fibroid Tumours of the Pregnant Uterus: Strangulation:
19 *b.* Removal.

The uterus, containing an ovum of about two months' development, is seen compressed between two large fibroid tumours, developed in the substance of its wall. One, embedded in the anterior portion of the wall, is about the size of an orange; the other, in the opposite portion of the wall, is as large as a small melon. Both were much larger before immersion in spirit.

The specimen was removed by Dr. Barnes on January 7th, 1877, by abdominal section, from a woman who had been suffering for three months from symptoms due to the presence of the posterior mass in the pelvis and its rapid growth. When removed, it had become impacted, and was in a gangrenous condition; and general peritonitis had been set up. The nature of the mass was not recognised before the operation, the rapidity of its development having led to the belief that it was of ovarian origin. The subsequent discovery of pregnancy explained the unusual rate of growth. Temporary relief to the pain was afforded by the operation, but the patient sank, and died after thirty hours.

St. George's Hospital Reports. Vol. viii, p. 91.

Presented by Dr. BARNES.

3970. Calcified Tumour of the Uterus.
67 *a.* The tumour is about as large as a Tangerine orange. It consists of a fibroid matrix imbedding numerous irregular calcareous masses. It was found attached by a pedicle to the fundus of the uterus in the body of a patient who died of some independent disease. It was covered by peritoneum.

No reference.

3971. Fibroid Tumours of the Uterus: Removal of one in Mis-
44 *a.* take for an Ovarian Tumour.

The uterus is enlarged to the size of a coco-nut. On its outer surface, and on the surface of its section, appear a number of small fibroid tumours. A larger one, the size of the spleen, is attached to the outer surface of the fundus, on its right side, by a flexible pedicle. A second thicker pedicle protrudes from the top of the fundus. It is encircled by a silver wire, and cut off short.

From the body of a woman aged 29, who died in the Hospital after an operation for the removal of the tumour to which the cut pedicle belonged. It was of fibroid nature, but of spongy consistence, with wide spaces between its meshes of fibres; and contained a large amount of fluid. It was of at least four years' growth at the time of operation. It filled the whole abdomen, embarrassing respiration to an alarming extent. When removed and drained of fluid, it weighed over eleven pounds.

Paracentesis had been performed twice before removal was attempted. In each case only a slight flow of fluid took place at the time, but nearly a gallon exuded gradually from the wound during the four and twenty hours succeeding. The operation was commenced as an exploratory one only, the diagnosis between fibroid tumour and ovarian cyst being considered doubtful, but the patient's condition a desperate one. The appearance of the tumour, on its exposure, so precisely resembled that of an ovarian cyst, that its removal was unhesitatingly proceeded with. The adhesions it had contracted were numerous and firm. The patient's exhausted condition demanded haste in operating, and, in breaking down the adhesions, the small intestine was ruptured. The patient rallied from the operation, but died suddenly four hours afterwards, apparently from hæmorrhage into the peritoneal cavity.

Post-Mortem and Case Book. 1865. No. 260. *Path. Soc. Trans.* Vol. xvii, p. 189.

3972. Epithelioma of the Uterus: Successful Removal.
89 *a*. The os uteri and part of the cervix are shown in the preparation, affected by epithelioma, and forming a tumour the size of a small orange.

The mass was removed by Mr. Pollock from a woman aged 40, who had been married for thirteen years, and had borne six children. She had suffered from pain and uterine hæmorrhage for two months. Removal was performed by means of the écraseur on September 28th, 1870. The patient rapidly recovered, and two years afterwards she was seen in good health.

Presented by Mr. POLLOCK.

3973. Abscess of the Ovary, twelve days after Parturition.
161. The uterus and ovaries are shown. The former is of the size of a Jargonelle pear. It is cut open. The internal surface, on the right wall, is ragged and soft, and some irregular shreds of tissue hang from it. The left

ovary is of normal size and aspect; the right ovary is enlarged to the dimensions of a small orange, and excavated by an abscess cavity.

From the body of an unmarried woman aged 28, who was delivered in Queen Charlotte's Hospital, after a good labour, on April 2, 1865. "She went on well, and on April 9 was removed into the convalescent ward. During the evening of the 10th, she complained of pain in the right side of the abdomen, but this only for a short time. On the 11th, she had passed a bad night. She complained, however, of no pain, nor did pressure on the abdomen cause any. The tongue was brown and dry; the pulse very quick and weak. On the 12th, these symptoms were exaggerated; the secretion of milk failed; the lochia ceased; and delirium, vomiting, diarrhœa, and total nervous prostration supervened. On the 13th, the abdomen became tympanitic; and the patient sank on the 14th. The treatment throughout was of a stimulating character.

"At the post-mortem examination, made within thirty-six hours, the body was found to be well nourished. The abdomen was enormously distended. The lungs were congested, and frothy mucus was found in the bronchi. The heart was uncontracted and healthy. On opening the abdominal cavity, the intestines were found intensely congested, and matted together with recent lymph; and the peritoneal cavity contained a large quantity of serum. On laying open the uterus, the surface where the placenta had been attached (on the right side) was ragged and soft, and hanging from it were shreds of disintegrating tissues. In the right ovary was an abscess the size of a Tangerine orange, as seen in the specimen, and pus was found in the Fallopian tube. No communication with the abdominal cavity could be discovered. The left ovary was natural. The remaining abdominal viscera were simply congested."

Presented by Dr. BRODIE.

3974. Abscesses of the Ovary.

137 *a.* The ovary shown, the right, is rather larger than a pigeon's egg. It is excavated by several communicating abscesses. The largest has an opening of small size upon the surface of the organ.

From the body of a woman aged 22, who died in the Hospital six months after her first confinement, up to which time she had been in good health. Shortly after delivery, the abscesses of the ovary formed, and, bursting into the vagina, set up and maintained a profuse discharge of pus. Three months later, symptoms of lardaceous

disease of the kidneys set in, and pneumonia, presumably due to this condition, was the proximate cause of death.

Post-Mortem and Case Book. 1869. No. 62. *Path. Soc. Trans.* Vol. xx, p. 435.

3975. Fibro-chondroma of the Ovary.

139 *a.* The tumour shown in the preparation is of about the size and shape of the human cerebrum. It consists of a material resembling cartilage, intersected by numerous bands of fibroid tissue. To the naked eye, its section resembled that of scirrhus. The microscope showed it to be formed of fibrous tissue and cartilage cells. It is surrounded by a thick membranous capsule.

Found connected with the left ovary in the body of a woman aged 46, who died in the Hospital of peritonitis, consequent on operation for strangulated hernia.

Post-Mortem and Case Book. 1867. No. 325.

3976. Ovariotomy: Ligature of the Pedicle.

157. The uterus and its appendages are shown. The left ovary is wanting. From the left cornu of the uterus arises a thick pedicle, transfixed and loosely ligatured, about an inch from the uterus, by a silver wire. The ligature can be slightly moved on the pedicle that it surrounds, and admits the passage of a probe inside it in almost any situation.

From the body of a woman aged 38, who died in the Hospital forty-one hours after the operation of ovariotomy. The operation was performed for an ovarian cyst of four years' standing, on November 15, 1865. Death was due to peritonitis. Five or six ounces of blood were found in the peritoneal cavity.

Post-Mortem and Case Book. 1865. No. 324.

3977. Ovariotomy: Ligature of the Pedicle.

157 *a.* The pedicle is shown, transfixed and ligatured by a wire suture.

No reference.

3978. Ovariotomy: Uterus Eleven Months after the Operation.

132 *a.* At the tip of the left cornu, a faintly granular surface indicates the situation of the wound. The left ovary and broad ligament have been completely removed. The right ovary, shown in the preparation, is carcinomatous.

The operation was performed by Dr. Barnes, in October

1878, for cystic disease. The patient, a woman aged 35, recovered from the operation, but died in September of the following year, from carcinoma of the peritoneum and opposite ovary.

Post-Mortem and Case Book. 1879. No. 260.

3979. Dermoid Cyst of the Ovary: Hair and Cheesy Matter
129 *a.* passed by the Urethra.

A coil of light-brown hairs, some nearly five inches long; their ends embedded in a mass of caseous material about as large as a hazel nut. The caseous mass consists of granular amorphous matter, with some crystals of hæmatin and triple phosphate. It is insoluble in ether or boiling alcohol, but soluble in liquor potassæ and in boiling acetic acid.

The specimen illustrates the case, in the practice of the late Dr. Fuller, of a lady who was presumed to have ruptured a dermoid cyst of the ovary by a fall in the hunting field at the age of 33. The extravasated contents produced a limited amount of suppuration, and the pus, forcing a path between the vagina and urethra, ultimately made its way into the bladder. About fifteen years later, after a fatiguing journey, active inflammation appears to have been set up in the cyst, and its contents began to break up. After an interval of two years and a half more, about a week before the passage of the specimen, a second journey by rail gave a final impulse to the disintegrating process. The contents of the cyst were subsequently dislodged by manipulation of the tumour which the sac of the abscess had formed in the vaginal wall, repeated on six successive occasions, after each of which hair and cheesy matter, as seen in the specimen, were discharged by the urethra. The hairs varied in length from an inch and a half to about nine inches.

Pathological Society's Transactions. Vol. xxi, p. 273.

Presented by the late Dr. Fuller.

3980. Hæmatocele of the Broad Ligament.
131 *a.* In the left broad ligament is a hæmatocele the size of a hen's egg. In the fresh state, it was as large as a duck's egg. The ovary is attached to its upper and outer aspect. The coverings of the hæmatocele are the peritoneum and the expanded ligament of the ovary; in the external portion, some of the fibres of the ovary itself, stretched out by the extravasation.

From the body of a woman aged 23, who died in the

Hospital of stenosis of the auriculo-ventricular orifices of the heart, with intense dyspnœa.

Post-Mortem and Case Book. 1877. No. 188.

3981. Hæmatocele of the Fallopian Tube.

131 *b.* The uterus and its appendages are shown. The left Fallopian tube, in the middle of its course, is dilated by a firm blood-clot the size of a small walnut.

No reference.

3982. Fatal Hæmorrhage from Rupture of a Graafian Vesicle.

167. The uterus and ovaries are shown, with the ruptured vesicle.

From the body of a Hindoo woman, who died with the usual symptoms of internal hæmorrhage. Until the fatal occurrence, she was in good health.

Presented by Dr. THEODORE DUKA.

XV.

DISEASES OF THE MAMMARY GLANDS.

3983. Hypertrophy of the Teat of a Bitch.

53. The teat is enlarged into a tumour of about the size and shape of a Tangerine orange. It was attached by a base hardly larger than a sixpence.

Presented by Mr. HENRY LEE.

3984. Adenoma of the Female Breast: Removal.

25 *a.* The tumour is of the size of an orange. It is of firm texture, and faintly lobulated.

The microscope shows it to be of adenomatous nature, formed of gland-tubes and acini, buried in a dense matrix of small oblong indifferent cells.

Removed from a girl aged 18, a patient in the Hospital, on June 19, 1879. It had been growing steadily for about seven months. Its presence had been preceded and accompanied by marked anæmia, with "globus hystericus", and accompanied by amenorrhœa. The whole breast (the right) was removed. The tumour was found to be completely encapsuled, and distinct from the gland.

Surgical Cases. 1879. No. 262.

3985. Cystic Tumour of the Female Breast: Removal.

51. The preparation shows a portion of the breast, containing a smooth-walled cyst, of about a drachm and a half capacity.

Removed, by operation, from a woman aged 46, a patient in the Hospital, on November 24, 1870. The tumour was of ten or twelve years' standing.

Surgical Cases. 1870. No. 1830.

3986. Sero-Cystic Tumour of the Female Breast.

5 *a*. "The tumour is composed of a large cyst, with a stout wall of fibrous tissue, about one-twentieth of an inch thick. One half of its circumference is covered by the integuments, and the other half by compressed fat. The nipple is on one side of the tumour, and is retracted in the spirit-kept preparation. There is no morbid growth outside the cyst, but under the nipple, for a breadth of two inches, the cyst-wall is separated into layers, between which masses of growth of the same kind as those within the cyst-cavity are insinuated. The cavity is large enough to contain about one pint of liquid. Into it, from the wall, enormous numbers of short, close-set, polypoid growths project, lining the interior almost completely, the incompleteness being in the part of the cyst corresponding to the skin, where some square inches are without these growths.

"The growths are of two forms, one sort being rounded, and attached by half the circumference; the other dendritic, finely branched at the free end, and attached by a slender stem. They vary in length from a projection of an inch to a scarce visible minuteness. Forms intermediate between the dendritic and rounded growths are present.

"Upon cutting sections through the rounded growths, they are found composed within of a vacuolated substance, the walls of the little spaces being made up of a fibrillated tissue, in which cells are embedded, the spaces containing an epithelial formation, which is defaced by the action of spirit, but can be seen to have been composed of comparatively large elements. This epithelium is detached from the walls of the spaces, and lies somewhat irregularly, but appears to have formed a lining to the spaces. Some of these spaces are elongated, others are rounded. In parts of the section, the spaces are few or absent, and the substance which forms their walls is present in quantity. The substance in such parts no longer has the appearance of close-set fibrillar tissue with flattened cells,

but it is seen as a fine web of exceedingly delicate fibrils, in which large caudate cells are embedded. These cells communicate together by their large branches, and by their small branches are attached to the imbedding fibril work.

"These characters may be summed up by describing the tumour as an adenoid growth within a tissue, whose substance is fibrocellular, complicated by the formation of a large cyst, into which, as in the direction of least resistance, the lobules of the tumour grow in the form of polypoid projections." (*Report of the Committee of Morbid Growths, of the Pathological Society.*)

The tumour was removed by Mr. Prescott Hewett, from a woman aged 40. It had appeared eighteen years previously, and had grown rapidly at first. The patient had been in the habit of tapping it with a penknife about once every six months, drawing off a quantity of clear limpid fluid on each occasion. The operation was performed in consequence of an increased rapidity in filling which the tumour began to display, coupled with a decline of the general health.

The patient made a good recovery, and no recurrence of the growth took place; but five years later, the axillary glands on the same side enlarged rapidly, and were found to be affected with carcinoma.

Pathological Society's Transactions. Vol. xx, p. 347.

Presented by Mr. PRESCOTT HEWETT.

3987. Fibro-Sarcoma of the Female Breast: Removal.

27 *a.* A lobulated ovoid tumour, as large as a small coco-nut, with a smaller tumour, the size of a walnut, superimposed upon it. The texture of the whole is firm and dense. It is surrounded by a thick fibrous capsule. A cavity of the capacity of one ounce is seen in the centre of the larger mass.

Removed, by operation, from a woman aged 33, a patient in the Hospital, on July 24, 1879. Its growth was of at least six months' duration, and during the last few weeks had been very rapid. The whole breast (the right) was amputated. The tumour, which, as seen, is encapsuled, adhered but feebly to the gland. On first section, the tissue was remarkably translucent, and somewhat gelatinous in aspect. The central cavity contained grumous material. The patient made a good recovery.

Under the microscope, the mass of the tumour was seen to consist of a homogeneous, transparent, finely

fibrillar basis, and of scattered connective tissue-cells, slightly elongated, bipolar or tripolar, and provided with short processes. The cells were of small size; they occurred more densely in some parts, losing their processes, and resembling sarcoma, whilst in other parts they suggested the idea of fibrous tissue in process of formation. In addition to the structures mentioned, a few spiral elastic fibres of extreme tenuity were noticed, and transparent protoplasmic masses were encountered, containing granules or proliferating nuclei, and resembling the amœboid cells of the buccal cavity. It was considered that some of these masses, in which active cell proliferation was occurring, might have subsequently developed into cysts.

Surgical Cases. 1879. No. 1185.

3988. Epithelioma of the Nipple.
52. Removed, by operation, from a lady aged 40, on October 16, 1872. The patient's mother had died of carcinoma of the breast.

Presented by Mr. PRESCOTT HEWETT.

XVI.

DISEASES OF THE SKIN AND ORGANS OF SPECIAL SENSE.

3989. Ulceration and Deformity of the Hand and Forearm, from
55 *a*. a Burn: Amputation.

No reference.

3990. Ulceration Carried to an Unusual Extreme: Destruction
107. of the Foot.

The distal portion of the foot has been destroyed by ulceration, leaving a pointed stump covered by granulations. The apex of the stump is formed by the metatarsal bone of the great toe.

The leg was amputated through the knee-joint by Mr. Pollock, in the Hospital, on June 4, 1868. The process of ulceration was then of about nineteen years' date. It had begun from some "sores" between the toes, which refused to heal, and extended until the foot "decayed" away. The patient had been under treatment in the

Hospital in 1867, with the result that the ulcer had healed slightly at the edges. He recovered from the operation.

Surgical Cases. 1867. No. 857. 1868. No. 762.

3991. A piece of tanned Buffalo Hide, showing the Cicatrix of a wound.

Presented by Mr. D. M. Ross.

3992. Hypertrophy of the Great Toe-Nail.

77 *a.* The nail is two inches and a quarter in length. It was removed from an out-patient of St. George's Hospital in August 1880. It was stated to be of eighteen years' growth.

Presented by Mr. E. G. Peck.

3993. Hypertrophy of the Great Toe-Nail.

The nail is seven inches and a quarter in length, and is curled like a ram's horn. It was removed from the left great toe of a woman aged 84, by Mr. William Allingham. It had not been cut for more than forty years.

Presented by Mr. William Allingham.

3994. Molluscum Fibrosum.

113. A large pendulous fold of hypertrophied and condensed areolar tissue, covered by thickened and corrugated skin, weighing two pounds and six ounces. The vessels are injected in blue, and the cut ends of the main channels distinguished by red rods. The tissues are thus shown to be abundantly vascular.

Removed, by operation, from a woman aged 33, a patient in the Hospital. The condition was congenital, or nearly so. Tumours of similar character existed in great number, varying in size from a split pea to a walnut. Two large ones, besides that shown in the specimen, were present. The latter grew from the right side of the neck, and hung down below the navel. Removal was performed by Mr. Pollock, March 15, 1872, by the introduction of needles, and ligature of the mass at its base. The patient made a good recovery.

Photographs of the patient are shown in Series xxi (*v. infra*).

Surgical Cases. 1872. No. 1698. *Medico-Chirurgical Transactions.* Vol. lvi, p. 255.

3995. Epithelioma of the Scalp.

85 *a.* A well-defined circular mass of fungating epithelioma, mixed with sebaceous matter, about three inches in

diameter at its base, resting on a circle of skin, in diameter about three-quarters of an inch more.

Removed by a circular incision from the left fronto-parietal region of a man aged 64. The operation was performed by Mr. Holmes on April 4, 1872. The tumour was of eight months' date. It had been removed after a fortnight's growth by the écraseur, but had recurred, and rapidly grown to its present size. The patient died, eleven days after the operation, of intracranial suppuration.

Post-Mortem and Case Book. 1872. No. 90. *Path. Soc. Trans.* Vol. xxiii, p. 277.

3996. Epithelioma of the Skin following Amputation: Extension
82 *a.* to the Subjacent Bone.

The leg is shown in longitudinal section, opened from its inner side. The skin is covered with scabs and shallow cicatrices. Over the front and inner side of the middle of the tibia is a patch of epitheliomatous nodules, the size of the palm, excavated about its centre by a deep cavity. The section, the plane of which passes through this cavity, shows that it extends nearly to the middle of the shaft of the tibia, the compact structure of which has been eaten away by the disease. The shaft is also surrounded at this point by epitheliomatous material.

From a patient of Mr. Pollock's, a lady, whose age is not stated. She was severely burnt in the leg; and an ulcer formed, which failed to heal. It subsequently assumed an epitheliomatous character, and the leg was, in consequence, amputated on October 10, 1871, twelve years after the injury. The patient made a good recovery.

Presented by Mr. POLLOCK.

3997. Melanotic Alveolar Sarcoma of the Skin.
96 *a.* A piece of skin, showing a warty patch an inch and three-quarters by three-quarters of an inch in size. From one edge of it grows, by a broad, short pedicle, a smooth nodule, the size of a large filbert. On section, the nodule presents a greyish-black coloration.

The microscope shows in the nodule three different elements:—1. Sarcomatous tracts, in which occur elongated cells, many of them pigmented; 2. Collections of small irregular cells in a wide-meshed delicate stroma; 3. Masses of large epithelioid cells, undergoing endogenous proliferation and vacuolation.

Removed from a woman aged 60, by Mr. Stirling, on June 26, 1879. The tumour was stated to be of two

years' growth; the warty patch to be congenital. The growth recurred in various situations. (See Preparation No. 3510, from the same case, and reference.)

Surgical Cases. 1879. No. 94.

3998. Rupia.
112. A scab from a rupial ulcer.

Presented by Mr. J. GODFREY THRUPP.

3999. "Madura Foot."
xvii 113. *Presented by* Dr. H. VANDYKE CARTER.

4000. Foreign Body in the Eye.
3 *b*. A fragment of lead, forming a thin sheet one-fifth of an inch square, removed from the anterior chamber of the eye, where it had been for three years.

Presented by Mr. BRUDENELL CARTER.

4001. Foreign Body in the Lens.
8 *a*. A lens containing particles of iron, by which it has been stained.

No reference.

4002. Ossification of the Retina.
106. The eye has been opened by a circular incision about a third of an inch behind the cornea. The choroid has been similarly divided, and reflected so as to expose the retina. Between the choroid and the sclerotic is a cavity which in the recent state contained a small quantity of fluid. The choroid and retina are, in consequence, compressed and shrivelled. The retina is converted into a plate of true bone, a line in thickness. Anteriorly, it is thinned and closely adherent to an opaque patch on the cornea.

Removed from a woman aged 31, a patient in the Hospital, in consequence of intense pain in the affected eye, and impairment of vision in the other. She had lost the sight of the former by post-variolar ulceration of its cornea.

Ophthalmic Cases. 1868. No. 1062.

4003. Pyæmia.
4 *a*. A longitudinal section of the eyeball. A quantity of broken-down tissue is seen in the posterior chamber of the eye, which, in the fresh state, was full of pus. The lens is pushed forwards so as nearly to touch the cornea. The tunics of the eyeball are, in one place, much thinned, so that the abscess is on the point of bursting.

From the body of a man aged 44, who died in the Hospital, of pyæmia, consequent on a slight wound of one knee.

Post-Mortem and Case Book. 1865. No. 210.

4004. Melanotic Sarcoma of the Choroid.

7 *a.* The specimen is discoloured from immersion in chromic acid.

The eyeball was removed by Mr. Brudenell Carter, o July 20th, 1877.

No history of the case was preserved.

4005. Gelatinous Polypus of the Nose.

37 *a.* A rounded plate of gelatinous polypus, about an inch in diameter and an eighth of an inch in thickness. It has been ruptured in avulsion. The fibrous pedicle, by which it was attached, is shown.

Removed by the forceps from the right nostril. It had been growing for two years. Attacks of hæmorrhage from the right nostril had occurred.

No reference.

4006. Sarcomatous Polypus of the Nose.

47 *a.* Three masses of melanotic sarcoma, having an aggregate size about equal to that of a Tangerine orange.

No reference.

4007. Necrosis of the Petrous Bone: Sequestrum Successfully

26 *a.* Removed.

A rough sequestrum comprising the greater part of the right petrous bone, with portions of the squamous and mastoid.

Removed from a child aged 20 months, by Mr. Dalby, in May 1875. A discharge from the right ear, associated with perforation of the tympanum, had been present since the age of 6 months; and pieces of bone had from time to time passed by the auditory canal. The child was brought to Mr. Dalby, with the above-mentioned discharge, with total deafness of the right ear, with right facial paralysis, and with a large fluctuating swelling over the mastoid process. The swelling being laid open, dead bone was exposed. A month later, the piece shown was removed with the thumb and finger. It appeared to be all that was left of the temporal bone. The wound healed, and, except that the facial paralysis persisted, the child recovered completely.

Medico-Chirurgical Transactions, vol. lxii, p. 240.

Presented by Mr. Dalby.

4008. Inflammation of the Tympanum: Destruction of the
26 b. Whole Ear: Rodent Ulcer.

The external ear is wanting; in its place is seen a cavity large enough to contain a Tangerine orange. Its walls are lined by ragged tuberculated tissue, in which appear portions of cancellous bone, the remains of the internal ear, which has been completely disorganised and in part destroyed. No trace of the tympanic structures appears.

No reference.

4009. Polypus Removed from the External Auditory Meatus.
21 a. No reference.

4010. Two Polypi, Removed from the External Auditory
21 b. Meatus.

The removal was performed by Mr. Rouse.

No reference.

XVII.

TUMOURS.

4011. Recurrent Sarcoma of the Scalp.
48 a. A circular piece of scalp, about two inches and a half in diameter, from which projects a group of six soft globular tumours, lobulated on the surface, attaining in all about the size of an orange.

Removed, by Mr. Pollock, from a woman aged 22, a patient in the Hospital, October 5, 1871. An operation had been performed for the removal of a tumour of three years' date from the same situation in the previous January, but it had recurred before the wound was completely healed. The tumour bled easily. The wound of the second operation healed well, and the patient left the Hospital on November 7.

Surgical Cases. 1871. No. 1393.

4012. Recurrent Myeloid Tumour of the Wall of the Thorax.
62 a. The front wall of the thorax is shown. The remains of a tumour are seen attached to its anterior surface, covering an irregularly circular area, about four inches in dia-

meter. The centre of the circle coincides roughly with the junction of the third right cartilage with its rib. The area therefore lies chiefly to the right of the middle line; touching the margin of the axilla on that side, overlapping the left border of the sternum on the other, and reaching, vertically, from the first rib to the fifth.

The morbid growth has invaded the intercostal muscles, and, in the second right space, appears on the inner aspect of the wall, as a slight projection beneath the pleura. In the recent state, the pleura covering the projection was of a purple colour; otherwise, that membrane was intact.

From the body of a woman aged 64, who died in the Hospital the day after an operation for the removal of the tumour. It was recurrent for the third time in the same situation. The first appearance dated from thirteen years, the last from nine months previously. The intervals between the operations and the successive recurrences were about three years, five, and two, respectively. On the last occasion, the tumour could not be eradicated on account of the invasion of the chest-wall. Death occurred from exhaustion. The patient had not previously lost flesh or suffered much in health.

The tumour, in the fresh state, was soft, of a pale-red colour, with irregular areas of yellow and rusty brown. Microscopically, it was seen to consist chiefly of fusiform cells with oval nuclei, embedded in a scanty, dimly granular matrix. Round and oval cells were also seen, and large "myeloid" cells, containing a dozen or more oval nucleolated nuclei.

The axillary glands were unaffected.

Post-Mortem and Case Book. 1873. No. 264. *Clin. Soc. Trans.* Vol. vii, p. 106.

4013. Fibro-Lipoma of the Neck, in a Child.

a. A lobulated tumour the size of a small orange, with a large tongue-like lobule depending from its lower aspect. The mass is composed of firm fat mixed with fibrous tissue; some of the lobules are purely fibromatous, others simply lipomatous.

Removed, by Mr. Holmes, from the neck of a child aged 3, a patient in the Hospital, in November 1864. It was of about a year's growth. It was situated in the posterior triangle, beneath the trapezius and sterno-mastoid. The whole tumour was invested with a firm fibrous capsule, from which it was enucleated with ease.

Surgical Cases. 1864. No. 1777. *Path. Soc. Trans.* Vol. xvi, p. 236.

4014. Congenital Lipoma of the Buttock, simulating Nævus.
20 *a*. A hemispherical mass of soft fat, as large as half an orange; covered, except at the base, by skin, which shows two broad cicatricial bands, crossing the tumour in a parallel direction.

Removed from the right buttock of a male child aged 10½ months, by Mr. Edgcombe Venning, in September 1875. It was congenital. At the time of birth it had attained the size of a pigeon's egg. It was elastic, very red on the surface, and became much more tense when the child cried. It was supposed to be of nævoid character; and about two months before its removal it was divided into three portions by passing two strong ligatures beneath the base, and tying them over the tumour. These portions contracted for a short time after the operation, but rapid growth soon succeeded, and removal by the knife was effected.

Clinical Society's Transactions. Vol. ix, p. 51.

Presented by Mr. EDGCOMBE VENNING.

4015. Lipoma of the Foot.
110. A section of the left foot of a child, showing the bones, muscles, etc., themselves healthy, embedded in a mass of lipomatous tissue, which might be described as the result of simple hypertrophy of the areolar and adipose structures of the limb. The same condition prevailed in the leg nearly to the level of the knee.

The patient was a child 8 months old. Amputation of the leg was performed, in consequence of the inconvenience arising from its bulk.

A cast of the foot is shown in Series XXII (*v. infra*).

Surgical Cases. 1867. No. 1362.

4016. Lipoma involving the Second and Third Toes.
24 *b*. A mass, the size of a large orange, embedding the second and third toes of the right foot.

Removed, by Mr. Tamplin, from a girl aged 10. The tumour was congenital, or nearly so, and had steadily increased in size. The wound healed by first intention. A fatty cushion, which was unavoidably left, was soon absorbed when the foot was again put to use. False toes of cork were applied to prevent the great toe from falling.

A wax model of the foot before operation is shown in Series XXII (*v. infra*).

Presented by Mr. TAMPLIN.

4017. Fibroid Tumour of the Scrotum.

30 *a*. An ovoid mass, the size of a coco-nut, composed almost entirely of fibroid tissue. The testicle is seen attached to the lower aspect. The tumour appears to have occupied the cavity of the tunica vaginalis, on the right side.

Removed, by Mr. Holmes, from a man aged 51, a patient in the Hospital, in June 1868. It was of thirty-three years' growth.

Surgical Cases. 1868. No. 892. *Path. Soc. Trans.* Vol. xx, p. 246.

4018. Chondroma of the First Phalanx of the Left Fore-finger.

67 *b*. The left forefinger is shown, with part of its metacarpal bone. From the outer side of its first phalanx sprouts an oval tumour the size of a hen's egg. Over it the skin, somewhat thinned, is continuous. Section shows the mass to consist of a cartilaginous structure, which also fills the medullary cavity of the phalanx and replaces its compact tissue on the side of the tumour. A portion of the compact tissue on the opposite side is similarly replaced by the morbid growth. The other bones are unaffected. The chondroid character of the growth was established by the microscope.

Removed from a lad aged 17, a patient in the Hospital. It was of five years' growth. A similar tumour had been excised from the same situation six years before its appearance. Amputation of the finger was performed by Mr. Pollock, August 10, 1871.

Surgical Cases. 1871. No. 1116.

4019. Encephaloid Carcinoma of the Hand.

85 *b*. The palm of the hand is filled up by a mass of encephaloid carcinoma, nearly the size of a cricket-ball. A fungoid ulcer is seen in the middle of the palm. The bones are unaffected.

Removed by amputation, on February 17, 1875, from a man aged 44, a patient in the Hospital, seven months after its appearance. The operation was performed by Mr. H. Lee. The patient subsequently died of carcinoma of the axillary glands. A tumour had been excised from the palm of the hand nine months before the amputation. This tumour was of two months' growth, and had appeared in the site of a growth removed four months previously. The primary growth was considered to be a degenerated blood-cyst.

Surgical Cases. 1874. No. 642. 1875. No. 246.

4020. Encephaloid Carcinoma of the Scapula.
61 a. The left scapula is shown. The supraspinous portion and the inner half of the spine are involved in a rounded mass of encephaloid carcinoma, that measures seven inches vertically, five inches and a half laterally, and four from back to front. The mass extends only about an inch below the level of the spine; the rest of its bulk lies above that level. The whole is surrounded by an ill-developed fibroid capsule. A section has been made, showing its substance, internally, in a state of disintegration. The portions of the scapula involved in the growth have been almost entirely destroyed.

To the posterior aspect is attached a triangular piece of skin, measuring about three inches each way. In its centre is an ulcerated opening, leading into the middle of the disintegrated tissue of the tumour.

The carcinomatous character of the growth was established by microscopical examination.

Removed, by Mr. Pollock, from a man aged 47, a patient in the Hospital, on September 30, 1869. The swelling had been noticed for about nine months. Much pain was experienced in the right arm, with partial loss of sensation. The lower angle of the scapula was pushed downwards and tilted outwards. The tumour was slightly moveable, even when the scapula was fixed. It was fluctuant. No abnormal sounds were detected in the chest.

The operation comprised, as the specimen shows, the removal of the whole scapula, with the tumour, and the triangular piece of skin adherent to it.

The patient died on October 5, with bronchitis, which had set in two days after the operation.

Post-Mortem and Case Book. 1869. No. 296.

4021. Papilloma Removed from the Back of the Neck.
xvi,75a. A circular patch of skin, the size of a crown-piece, covered with a thick-set tuft of warty growths.

Removed from the back of the neck of a girl aged 19, by Mr. Pick, on September 3, 1869. It was stated to be a congenital growth. The patient recovered rapidly.

Surgical Cases. 1869. No. 1354.

4022. Papillomata of the Vocal Cords.
112. Three small fragments of papillomatous growth.

Removed from the vocal cords of a boy aged 6, by Mr. H. Lee, December 16, 1871. He had been admitted into

the Hospital in January 1870, for urgent dyspnœa, which was relieved by tracheotomy. He continued to wear a tube until the time of the operation. The larynx was opened by division of the thyroid cartilage, and the growths removed by forceps and scissors from the lower borders of the cords. The tube was taken out of the trachea thirty-seven days later, and the child left the Hospital on the seventy-first day, with a hoarse voice, but otherwise quite well. When he was again seen, two years later, the voice had much improved.

Surgical Cases. 1871. No. 1780.

4023. Cystic Adenoma.
III.

The specimen consists of a mass of cysts, a dozen in number, separated by a little solid tissue. The largest cyst, at the lower part of the tumour, is of about half a pint capacity; the others vary from the size of a hazel nut to that of a hen's egg. They communicate with each other by means of rounded openings. The walls of the largest are thin and diaphanous, those of the smaller ones considerably thicker. In the former, and in some of the latter, muscular fasciculi are seen naked on the internal surface. The cysts, in the recent state, were filled with a clear serous fluid.

In the solid matter are seen numbers of irregular cavities, and of small cysts, without distinct linings, filled with fat.

A full description of the microscopical appearances of the morbid mass appears in the *Pathological Society's Transactions*, as referred to below. The general character of the tumour is summed up by the Morbid Growths Committee as follows. "An adenoid growth, developed in a fibro-nucleated tissue and complicated by the formation of cysts, probably caused by the breaking down of the tissue itself."

From the body of a boy 3½ years old, who died in the Hospital for Sick Children. The tumour was developed in the tissues lying behind the peritoneum of the right half of the abdomen. It occupied the right lumbar and iliac, and the hypogastric regions of the abdomen, the cæcum and ascending colon lying in front, the rectum behind. The kidney was compressed between the tumour and the spinal column. The suprarenal capsule adhered to the anterior surface. The cysts had excavated the lumbar muscles, which contributed to form their walls. A large elongated, thin-walled cyst extended from

the lower end of the mass into the scrotum, after the manner of a hernia.

The tumour was congenital, the scrotal portion and two masses in the right flank having been observed at birth. Death was due to the rupture of the largest cyst into the peritoneal cavity. The surface of the peritoneum was plentifully besprinkled with little hard grey nodules, resembling miliary tubercles, which appeared to be superficial fixtures, developed from germs let loose by the bursting of the cyst.

Pathological Society's Transactions. Vol. xxii, p. 287.

Presented by Dr. DICKINSON.

4024. Calcified Sebaceous Tumour of the Neck.

10 *a.* The tumour is of about the size of a large filbert, and weighs 55 grains.

Removed from the neck of a girl aged 16, by Mr. Pollock. She made a good recovery.

No reference.

4025. Cystic Tumour of the Leg, containing Blood-clot. (? Sar-

19 *a.* coma.)

An oval cyst filled with reddish-brown blood-clot, measuring four inches and a half by two inches and a half. Except on one side, where the interior of the cyst lies open, it is covered by skin; but over the lower part of the cyst the skin is thinned away, till there is left only a delicate layer, that in the fresh state resembled mucous membrane. This layer is interrupted by cracks and fissures. Between it and the blood-clot, the microscope reveals a thin stratum of sarcomatous tissue, hardly perceptible to the naked eye.

Removed from the outer side of the leg of a man aged 30, a patient in the Hospital. The operation was performed by Mr. Holmes, on April 3, 1873. The tumour had been growing for two years. Hæmorrhage had taken place from it on many occasions since the sixth month of its growth, the whole mass becoming distended and blood rushing out from one of the cracks in the thinned area of the skin. It was freely moveable on the parts beneath. The patient's health was good, but for the weakness caused by the bleeding. No communication of the cyst with the vascular system was found after its removal.

The patient did well.

Pathological Society's Transactions. Vol. xxiv, p. 213.

4026. Fibro-Sarcoma of the Periosteum of the Fibula: Amputation.
32 a.

A flattened mass about the size of a small orange, situated directly beneath the skin, which in one place is ulcerated. Only the tumour and skin are shown.

Microscopic examination showed the mass to consist mainly of heavy laminated fibrous tissue, arranged in various systems of curves. It was in process of segmentation, owing to infiltration with small cells of two kinds, viz., 1. Small round indifferent cells, probably resulting from the inflammatory state of the parts; 2. True connective tissue cells of rather large size, and probably of sarcomatous tendency, undergoing proliferation in the fissures which they had invaded.

Amputation above the knee was performed for this growth by Mr. Prescott Hewett, in December 1879. It appeared to have been originally connected with the periosteum of the fibula. It was, at the time of removal, of five years' growth, and had been for three years the seat of ulceration. Two nodules had appeared in the thigh; and enlarged glands in the groin.

Presented by Mr. PRESCOTT HEWETT.

4027. Cystic Enchondroma of the Head of the Humerus.
67 a.

A mass of morbid growth is seen, replacing the head of the right humerus. Its surface is ragged. It is riddled with cysts of various sizes, up to that of a small marble. The intervening tissue presents microscopically the appearance of cartilage.

From the body of a woman aged 60, a patient of Mr. Pollock's, who died July 22, 1867. She had already been suffering from great pain in the left acromial region, considered to be due to inflammation of the acromio-clavicular joint, when, five years before death, a tumour appeared, which subsequently attained the size of an infant's head. It was, at the time of removal, of a fairly regular oval shape, darkly discoloured in parts. The skin was commencing to be implicated and to give way.

On August 20, 1865, it was removed by Mr. Pollock. It was found to be connected with the acromion process, and the outer end of the clavicle appeared to be somewhat affected by the pressure or proximity of the tumour. These two portions of bone were accordingly removed, as also was the greater portion of the deltoid muscle, which was stretched over the tumour. The head of the humerus, surrounded by its capsule and attached muscles, was thus exposed. The tumour proved to be a large cyst, with walls

of varying thickness, to the inner surface of which adhered thin layers of chondroid tissue. Its contents were a dark coloured fluid, with disintegrated chondroid tissue floating in it.

The patient made a good recovery, and regained, in the course of a few months, considerable use in the arm, notwithstanding the loss of the deltoid muscle. About eighteen months later, he began to complain of pain in the right shoulder, referred to the head of the humerus. Enlargement of the head soon showed itself, and, after a short time, increased rapidly. It was proposed to amputate at the shoulder-joint, but the patient would not consent to the operation.

The mass was cut into on January 23, 1867, and proved to be cystic, and of similar character to the original tumour. The cyst was dressed with strong caustic lotions, but without benefit. Fungoid granulations sprang up from the interior, and rapidly increased in size and extent; and the patient gradually sank.

Presented by Mr. POLLOCK.

4028. Carcinomatous Cyst of the Arm.

85 *a*. In the substance of the triceps muscle of the arm is imbedded an oval cyst about the size of a coco-nut, bounded by a distinct but rough and shreddy lining membrane. It extends from the level of the neck of the humerus above to the junction of the middle and lower third of the arm. Anteriorly, it is in close relation with the brachial artery and the nerves to the forearm; posteriorly, the fibres of the triceps are expanded over it. In the recent state, the sac was filled with a thick grumous material, mixed with fresh blood. The contents gave evidence of a carcinomatous origin under the microscope.

Removed by amputation through the shoulder-joint from a woman aged 59. The tumour was of four months' date at the time of operation. It was fluctuant. About two months before the operation, it had been punctured; some two ounces of yellowish serum escaping. Death occurred four days after the operation, from fatty heart, as was supposed; but no post-mortem examination was made.

No reference.

4029. Fibro-Chondro-Myxoma.

64 *a*. A lobulated mass about the size of an infant's head. Section shows a lobulated structure, with a series of irregular cavities that distantly resemble the vomicæ of a phthisical lung.

Microscopically, the tumour is found to consist of a mixture of fibroid, chondroid, and myxomatous tissue.

Removed from the popliteal space of a man aged 37, a patient in the Hospital, by Mr. Rouse, in 1869. It was of fourteen months' growth, and caused inconvenience owing to its bulk. It lay immediately behind the popliteal vessels. It was easily turned out of its bed when exposed by a straight incision. The patient made a rapid recovery.

Surgical Cases. 1869. No. 1638.

4030. Tumour of Doubtful Nature.

109. A large tumour situated on the palmar surface of the hand. It consists of two lobules, joined by an isthmus. One, the larger, of the size of an orange, is situated in front of the metacarpal bones of the fourth and fifth fingers. It extends from the wrist-joint nearly to the metacarpo-phalangeal articulation, and projects considerably on the ulnar side of the little finger. It has pushed its way between the two metacarpal bones, and produced very great thinning and absorption of them. The other lobule, of smaller size, lies in front of the second and third metacarpal bones. It projects towards the metacarpal bone of the thumb, but does not implicate it. The second and third metacarpals are much thinned on their anterior aspect, but the tumour has not pushed its way between them. On section, the mass is found to be enveloped in an imperfect sheath or capsule, which appears to have been formed by consolidation of the tissues around. Within this capsule is a quantity of softened granular material, of caseous aspect, forming the mass of the tumour. Under the microscope, it was found to consist of small nucleated cells, ill-formed pus cells, fatty globules, and much granular matter; with, here and there, scales of cholesterin.

The arm was removed from a young lady, aged 20, who had been under the care of Mr. Prescott Hewett for some months with a large ganglion in the palm of the hand, which extended upwards in the front of the wrist, under the annular ligament, in the sheaths of the flexor tendons. It was punctured, and a quantity of thick, jelly-like fluid escaped. After a few days, hæmorrhage took place from the puncture. The swelling became solid and increased rapidly, with repeated hæmorrhage from the puncture, which had assumed a fungous appearance. There was an hereditary taint of cancer in the family. The patient rapidly emaciated, and hæmoptysis frequently occurred. Amputation was deter-

mined upon and performed. The patient made a good recovery.

The operation was performed in 1863, and in 1868 she was reported as being quite well and in good health.

Presented by Mr. PRESCOTT HEWETT.

4031. Adventitious Body found in the Peritoneal Cavity of a
116. patient, formerly the subject of Peritonitis.

A pear-shaped mass of laminated fibrin; surrounded by a cyst-wall, 1-40th of an inch thick, which in the recent state presented a pearly aspect.

The specimen was found loose in the peritoneal cavity of a female aged 69, who died in the Hospital after an operation for umbilical hernia. Many of the coils of intestine were joined together by adhesions so intimately blended with their walls that it was impossible to say where one began or the other ended.

Post-Mortem and Case Book. 1880. No. 158.

4032. Abscess.
108. The wall of an abscess of about four drachms' capacity.

Removed from the inner side of the arm of a strumous young man during life.

No reference.

4033. Congenital Fibroid Tumour of the Orbit: Atrophy of the
xvi, 5a. Eye: Removal.

The collapsed remains of an eyeball are seen resting on a large mass of substance much resembling udder, of a hard uniform feel, and white colour. Numerous cysts have been laid open; in the fresh state they contained clear serum. Some smaller masses are attached to the principal tumour.

Under the microscope, the solid portion shows nothing except fibrous tissue and simple nuclei.

Removed from a female child aged 7 weeks. The operation was performed by Mr. Holmes, on April 6, 1863. The tumour was congenital. At the time of birth it was large enough to protrude the eyeball from the orbit. The eyeball soon afterwards burst, and withered away. The tumour continued to grow. Syncope, probably due to shock rather than hæmorrhage (no anæsthetic was given), set in during the operation, but by vigorous efforts the child was rallied. It made a good recovery.

Pathological Society's Transactions. Vol. xiv, p. 248. *Lancet,* 1864. Vol. i, p. 605.

4034. 117. Tumour (Fibro-Sarcomatous) of the Orbit, Removed by Operation.

The tumour was removed from the orbit of a male patient, aged 49, in St. George's Hospital. Twenty-eight years before admission the patient remarked a knot the size of a pea in the left lower eyelid. In ten months it attained the size of the terminal phalanx of the thumb, and was then removed by Mr. Charles Guthrie. The patient remained perfectly well for eight or nine years. A sensation of fulness and stretching about the eyelids now occasioned him some inconvenience, and the sight of the left eye became impaired. The growth, which had recurred, was then (in 1860) removed by Mr. Wharton Jones, who found it to consist of a mass of fibrous tissue attached to the periorbita, displacing the eyeball inwards. Five years later the growth again recurred, and when the patient came a second time under Mr. Wharton Jones' care, the eyeball was found to be protruding and degenerated, being thrust forward by a mass that completely filled the orbit. The eyeball alone was then removed. Up to this time the growth was not considered to have invaded the antrum. A few months later the tumour bulged forwards out of the orbit, and spread over the face, extending laterally and downwards. It slowly and steadily increased during the fifteen years that elapsed between the last operation and the patient's admission to St. George's. During the last nine months, after a blow, it increased with much greater rapidity. The nose was pushed over to the right side, and the tumour extended into the mouth. Left facial paralysis gradually supervened. During all these years the patient had led the most secluded life, but his general health had suffered little.

The appearance of the tumour on admission is depicted in a photograph (*v. infra*, Ser. xxi). It occupied an enormously distended antrum, and bulged forwards over the face. The left orbit was so enlarged that the measurement from the centre of the lower edge of the chin to the middle of the orbital arch was, on the right side, five inches and a quarter; on the left, six inches and five-eighths. In consistence the tumour was uniformly smooth, tough, fibrous, and but slightly elastic. It was not painful on pressure. From the middle of the fore-part sprang a second boss, ulcerated on the surface. The thinned skin elsewhere was tightly drawn over the mass, and was not implicated. Speech and deglutition were scarcely affected; mastication was a little interfered with. On July 8, 1880, Mr. Pollock removed the tumour, together with

the superior maxillary and malar bones. The growth shelled readily out of the orbit, but the roof of that cavity was found to be extremely thin, and the pulsations of the brain were perceptible at the back part. Nearly all the skin was preserved. For a day or two the patient went on well, but then weakness, restlessness, and delirium supervened, and it was clear that inflammation of the brain overlying the orbit was going on. Exceedingly foul discharge from the cavity made by the operation further distressed him, and he died on July 13.

The cavity, after death, was found to occupy the orbit and the site of the superior maxillary bone, and to communicate with the mouth and left nostril. The septum nasi was abnormally thin. The roof of the orbit was thin, and eaten into holes. It was separated from its connections, and was readily detached in one piece. On its removal, the dura mater was seen to be injected, and pus was found between the dura mater and the brain. Over the orbital plate the surface of the brain was hyperæmic, and its superficial layer softened. The edges of the orbital arch were rough. Further than this, the body was not allowed to be examined.

The microscope showed the tumour to consist of fibroid tissue, with small-celled sarcoma interspersed.

Post-Mortem and Case Book. 1880. No. 236.

4035. Naso-Pharyngeal Polypus: Removal.

38 *a*. A tumour consisting of two portions, one of the size and shape of a cow's teat, and a second of smaller dimensions, separated by a deep groove. The groove, in the complete state of the parts, lodged the soft palate, the larger lobe projected into the left nostril, and the smaller hung down into the pharynx. At the point of junction of the lobes is seen the ragged surface by which the growth was attached to the under surface of the body of the sphenoid bone. The tumour is composed of loose fibroid tissue, and enveloped in a firm capsule.

Removed by Mr. H. Lee from a man aged 27, a patient in the Hospital, on May 31, 1866. The mass in the nostril had been observed for only three months, but attacks of bleeding from the nose and mouth had occurred for about eighteen. In the Hospital the tumour bled freely on being touched. It was reached by making a single incision down the side of the nose and removing the greater part of the superior maxilla, the orbital and nasal processes being left. The patient made a good recovery.

The portion of bone removed is shown in the preparation.

Surgical Cases. 1866. No. 774.

4036. A Fibroid Epulis, with the Tooth to which it was at-
25 *b.* tached.

Presented by Mr. PRESCOTT HEWETT.

4037. Mediastinal Tumour (Sarcoma): Fatal Compression of the
vi, 64*a.* Trachea.

The œsophagus, trachea, and heart are shown, with part of the diaphragm. A mass of morbid growth, the size of a coco-nut, is seen in front of the heart, trachea, and great vessels. In the complete state of the parts it occupied the anterior mediastinum, reaching as high as the middle of the thyroid cartilage. It surrounds the trachea as far as its bifurcation. In about the middle of its course the trachea is compressed laterally, so that nothing but a button-hole is left.

The condition of the laryngeal nerves is not perceptible in the specimen.

Under the microscope, a multitude of nuclei are seen, with fibrillating cells, and intertwining fibrous tissue.

From the body of a man aged 25, who died in the Hospital. The case was of about ten weeks' duration. During the first six, shortness of breath was noticed on lying down to sleep. From the fifth or sixth, cough and slight dysphagia were present. A sudden attack of dyspnœa occurred at the end of the sixth. Venesection was employed for its relief, and syncope resulted. The patient was admitted, and for a week appeared to benefit by treatment; but dyspnœa recurred after that period in severe paroxysms at night or on exertion, and one such paroxysm proved eventually fatal.

Post-Mortem and Case Book. 1863. No. 220.

4038. Mediastinal Tumour (Lymphadenoma): Compression of
vii, 32 *a.* the Right Bronchus.

The preparation shows a lobulated mass of lymphadenoma in the anterior mediastinum. It lies in front of the bifurcation of the trachea, and of the lowest two inches of that tube, and fills up the concavity of the aortic arch. It is somewhat flattened out upon the trachea, and embraces a third of its circumference. Behind the trachea some smaller masses, apparently enlarged and altered glands, are seen at a somewhat lower level. They extend from an

inch above the bifurcation to about two inches below, and lie chiefly behind the right bronchus.

Besides these circumscribed growths, a thick sheath of lymphadenomatous tissue surrounds the lower part of the trachea, its bifurcation, the right bronchus, and the vessels of the root of the right lung. Thick plates of similar material follow the connective tissue planes of the lung for some distance from its root.

By the combined influence of the diffused sheath, and of the circumscribed tumours, the right bronchus has been so compressed from before backwards, that its tube is reduced to a narrow slit through which a sixpence would barely pass edgeways. The blood-vessels are not obstructed.

From the body of a man aged 64, a patient of Dr. Dickinson's, who died in 1872. He had suffered for rather more than six months from increasing dyspnœa, with slight cough. In the later stages, a little rusty mucus was expectorated, and paroxysms of the dyspnœa occurred. Respiratory movements, percussion resonance, and breath-sounds disappeared entirely from the upper part of the right chest before death, and a sonorous rhonchus was heard over the whole of both lungs, loudest in the upper part of the right scapular region. The patient himself referred the obstruction to a spot beneath the upper part of the sternum.

Pathological Society's Transactions. Vol. xxiv, p. 33.
Presented by Dr. DICKINSON.

4039. Mediastinal Tumour (Lymphoma).
vii, 32 *b*. The contents of the thorax are shown. The posterior mediastinum is occupied by a mass of lymphoma, from the level of the bifurcation of the trachea downwards. The bronchi are not compressed, but the vagi are involved in the growth, infiltrated and expanded. Their recurrent branches are given off above the tumour. The œsophagus is pushed backwards, and to the right; and the left auricle of the heart is compressed. The walls of these viscera are infiltrated with the morbid growth, and nodules appear on their inner surface, which, in the case of the auricle, are ulcerated. The lower lobe of the left lung is also infiltrated with the growth, which has extended outwards from the root, and ulcerated into the pleural cavity.

The tumour is of soft consistence, and pale yellow colour; caseous patches are seen, especially in the pul-

monary portion, upon the surface of which colloid change has taken place also.

Under the microscope, the pulmonary portion shows extensive caseation, and a homogeneous fibroid growth with numerous nuclei. The body of the tumour consists of small round cells solely. Throughout its extent are scattered small hæmorrhages, and patches of caseous degeneration.

Secondary deposits were found in the brain and dura mater (Preparations Nos. 3753 and 3754), in the pancreas, and in the left suprarenal body.

From the body of a man aged 46, who died in the Hospital, after suffering from a slight cough for eight weeks, and from the symptoms described under preparation No. 3754 for a briefer period. Slight hæmoptysis had occurred for two or three days about three weeks before death. There was no dyspnœa.

The patient was in Hospital during the last seven days of life. Resonance was absent, and vocal fremitus deficient, over the whole of the back of the left lung, the respiratory sounds being faint, but natural. The apex of the right lung was dull, with harsh breathing. Vocal resonance was nowhere bronchophonic. The cardiac sounds were natural, the apex-beat not perceptible.

Post-Mortem and Case Book. 1879. No. 180.

4040. Tumour of the Rectum.

xiv,166. A tumour removed from the rectum of a female by Dr. Barnes, in January 1879, by means of the galvano-cautery. The patient had been recently confined, and during parturition the tumour had descended. In a former confinement, about three years previously, a similar mass had passed the sphincter, and had been returned as prolapsed bowel. It had not again protruded in the interval. The patient made a good recovery.

The tumour is ovoid, measuring three inches by two, and flattened in one direction. Its outer investment is rough; in the recent state it was flesh-coloured. The section was then of a dull white, and the consistence moderately firm. The neck was narrow. It was, when severed, green on one side from incipient sloughing. The gangrenous condition extended for some distance superficially along one side of the tumour.

Microscopic examination showed the tumour to be of hæmorrhoidal nature.

Presented by Dr. BARNES.

4041. Tubular Epithelioma of the Female Breast.

xv, 54. The tumour is a lobulated mass, irregularly oval in shape, situated below the nipple, and distant from it rather more than an inch. Its longest axis, the vertical one, measures four inches and a half, the shortest two inches and a half. It lies directly under the skin, which is stretched over its anterior aspect, thinned, and loosely adherent to it. Elsewhere, the tumour is enclosed by a delicate capsule, and surrounded by firm fat.

The tissue of the tumour is firm and compact, and of fine grain on section; but under the knife it does not present the gritty hardness of scirrhus. It is permeated by bands of white fibres. Beneath a small area of the subcutaneous surface, they unite to form a fibrous mass, to which the skin is intimately adherent.

Under the microscope, the tissue is seen to be composed almost entirely of large cells of epithelial type, in themselves difficult to distinguish from carcinomatous cells, but in their arrangement, in their average shape, and in their mode of growth, presenting a closer approximation to epithelioma than to encephaloid disease. The prevailing arrangement is in columns of cells, of considerable size; between the individual groups there exists but a slender bundle of fibres, evidently stretched by the cellular growth. The cells show none of the tailed forms usually present in soft cancers, and, unlike carcinomatous cells, they present no fatty-granular degeneration, but are extensively converted into a colloid substance, which has either infiltrated single cells and led to vacuolation, or merged several cells into a transparent amorphous mass.

The mammary gland, only a part of which is shown in the preparation, was found converted into a series of hard fibroid masses. The largest mass was connected with the tumour by a narrow tongue of fibrous tissue, which sank deeply into the latter, and supplied it with a branching stroma of brilliant white fibres.

Removed from a woman aged 58, a patient in the Hospital. The operation was performed by Mr. Pollock, on May 29, 1879. The tumour had then been noticed for four years, and had been growing steadily during that time. The patient's health had not appreciably suffered.

The tumour appeared, before removal, as a firm solid mass, freely movable, lumpy at the surface, with a few fluctuating patches. It was covered by thin and irregularly congested skin. It appeared to be distinct from the mammary gland, which was thought to be normal.

The nipple was not retracted. No enlargement of the axillary glands was detected.

The wound of the operation healed in little more than a month.

Surgical Cases. 1879. No. 845.

XVIII.

DISEASES OF THE OVUM AND APPENDAGES. MONSTROSITIES.

4042. Fallopian Tube Gestation.

52 *a.* An early ovum, hardly as large as a marble, is seen in the left Fallopian tube, close to the uterus.

The patient died from hæmorrhage into the peritoneal cavity.

Presented by Mr. GOODCHILD. 1878.

4043. Hydatid Ovum.

39 *a.* Removed by operation from a lady who had suffered for several weeks from vomiting so severe as to endanger her life. She recovered completely after the removal.

Presented by Dr. BARNES. 1877.

4044. Intra-uterine Death.

41 *a.* An early ovum retained till the eighth month. The amnial sac is about an inch in diameter. The choroidal sinuses are distended with coagula.

Expelled from a patient aged 23. The precise period from the cessation of the catamenia to the expulsion was two hundred and thirty-eight days.

No reference.

4045. Defective Development of the Head.

8 *a.* A fœtus, about the size of one at eight months, perfect in every part but the head. The face is natural, but the frontal bone terminates just above the eyes, and the scalp forms a flat shelving slope from the orbital ridges to the cervical vertebræ.

The spinal cord ends in a nodose extremity opposite the second vertebra.

The thoracic and abdominal viscera are natural.

Presented by Mr. GEORGE HARRISON.

4046. Joined Twins.

4 a. Twins, of slightly different size, united anteriorly in the middle line from the episternal notch to the umbilicus.

Both sterna are divided longitudinally in their whole length, and the right half of the one is fused with the left half of the other. The thoracic cavities communicate. A single pericardial sac contained the hearts shown as Preparation No. 3586. The abdominal cavities communicate, and the livers (Preparation No. 3848) are united by their posterior borders.

The viscera of the smaller fœtus (to which the smaller of the two hearts belonged) are transposed, the aorta running down the right side of the vertebral column.

The umbilical cord was single until its entrance into the abdominal cavity.

Pathological Society's Transactions. Vol. xx, p. 423.

4047. Webbing of the Toes.

65. Two toes, joined together by their adjacent sides.

From the body of a patient who died in the Hospital.

No reference.

4048. Defective Development of the Abdominal Wall, and of the

23 a. Skull.

The abdominal wall is incompletely closed in front, and most of the abdominal viscera are extroverted. They are slightly congested, owing to partial strangulation.

The vault of the skull is entirely deficient, and the cerebral hemispheres are altered in position, their axes being nearly vertical. The dura mater is twice perforated by the umbilical cord, which, in its passage from the placenta to the navel, enters the cerebral cavity close to the frontal eminence, and passes out at the vertex. The cord was divided in two places by the nurse, and the placenta destroyed.

The development is otherwise complete.

The fœtus was expelled at the seventh month. Nothing remarkable occurred during gestation.

Presented by Mr. E. J. Carver, 1879.

XIX.

CALCULI: FOREIGN BODIES.

4049. Large Lithatic Calculus.
489 *a*. A calculus, the size of a large orange, weighing eighteen ounces and three-quarters. The outer crust, part of which has broken off, consists of lithate of ammonia; the interior of lithic acid. The broken pieces are included in the above weight; the calculus was intact when extracted.

Removed by Dr. Oldham, H.M. Bengal Army, from a man aged 70, a native of Bengal, June 24, 1868. It was extracted with much difficulty by lateral lithotomy, and the incision made extended across to the opposite side of the perinæum. The patient, who was very decrepit, and worn out by the irritation of the stone, died suddenly of exhaustion eight hours after the operation.

Presented by Dr. OLDHAM.

4050. A Pear-Shaped Lithatic Calculus, weighing one hundred
498. and fifty-eight grains, expelled spontaneously from the female bladder.

No reference.

4051. Uric Acid Calculus.

The half only is shown, weighing five drachms and a quarter.

Removed by Sir Benjamin Brodie, on the last occasion of his performing lithotomy, Aug. 1841.

Presented by Mr. CHARLES HAWKINS.

4052. Square Uric Acid Calculus.

The half only is shown, weighing fifty-seven grains.

Presented by Mr. CHARLES HAWKINS.

4053. Uric Acid Calculus, coated with Phosphates.
126 *a*. Total weight, seven hundred and ninety-five grains.

From the body of a man aged 63, who died in the Hospital. He had suffered from symptoms referable to the stone for ten years, and was moribund on admission.

Post-Mortem and Case Book. 1871. No. 237.

4054. Uric Acid Calculus, on a Nucleus of Oxalate of Lime.
194 *a.* Removed, by lithotomy, from a patient in the Hospital, by Mr. Pick, October 28, 1880.
The whole calculus weighed 1100 grains. The smaller fragments have not been preserved.

4055. Four Mulberry Calculi, of Oxalate of Lime, passed by
492. the Urethra from a woman aged 24.
The largest is of the size of a very large pea, and weighs nine grains and a half. The four together weigh forty-one grains.
Presented by Mr. H. LEE.

4056. Elongated Phosphatic Calculus.
377 *b.* An elongated phosphatic calculus, one inch and three-quarters in length, three-eighths of an inch in greatest width, slightly curved. The section shows the curve to be due to the final deposition of material at and near one end.
Removed from the bladder of a woman.
Presented by Mr. GEO. POLLOCK, 1878.

4057. Phosphatic Calculus, on a small Oxalic Acid Nucleus.
The half only is shown, weighing seven drms. and a half.
Presented by Mr. CHARLES HAWKINS.

4058. Phosphatic Calculus, on an Oxalic Acid Nucleus.
Weight, seven drachms.
Presented by Mr. CHARLES HAWKINS.

4059. A Gum Catheter Encrusted with Phosphates.
383 *a.* It had been allowed to remain for three days in the bladder of a man aged 75.
Presented by Mr. H. LEE.

4060. A Small Piece of Bougie, thickly Encrusted with Phos-
493. phates.
Removed, after death, from the bladder of a man aged 68, who died from the effects of stricture of the urethra.
Post-Mortem and Case Book. 1873. No. 38.

4061. Phosphatic Calculus, on a Hair-pin Nucleus.
377 *a.* Fragments of phosphatic calculus, weighing altogether five hundred and twenty-five grains, with a hair-pin.
Removed from the bladder of a woman, by Mr. Geo. Pollock, August 8, 1878. The calculus was extremely brittle.

4062. Phosphatic Calculus, on a Hair-pin Nucleus.
377 c. Fragments of phosphatic calculus, weighing altogether about five hundred grains, with a twisted hair-pin.

Removed, by Mr. Pick, from the bladder of a woman aged 25, a patient in the Hospital, April 20, 1880. As far as could be made out, the hair-pin had been inserted about a year before. Incontinence of urine was the chief symptom complained of.

The stone was first crushed by the lithotrite, which was readily done. The urethra being dilated, a finger was inserted into the bladder. It came into contact with the hair-pin, lying across the cavity. The pin was twisted, and extracted by a sequestrum-forceps. The calculous matter was washed out by Clover's syringe. The patient did well.

Surgical Cases. 1880. No. 650.

4063. Phosphatic Calculus, on a Hair-pin Nucleus.
377 d. An irregularly ovoid phosphatic calculus, the size of a walnut. From the larger end project for an inch the points of a hair-pin, the rest of which is imbedded in the calculus. The hair-pin is made of two wires twisted together spirally.

Removed, by dilatation, from the bladder of a girl aged 20, about the year 1860.

No further history.

Presented by Mr. G. R. TURNER.

4064. Ten Calculi of Triple Phosphate, weighing two ounces
497. and a half, removed by Mr. Holmes, by means of Lithotomy.

No reference.

4065. A Collection of Urinary Calculi: Removed from Natives
1 a. of Western India.

Presented by Dr. H. VANDYKE CARTER and Messrs. ABDOOL K. LOOKMANJEE, and DORABJEE HORMASJEE.

The calculi are arranged as follows:—

1. Fragments of calculus removed by lithotomy from an adult male.
2. Fragments ,, ,, a male aged 4 years.
3. Fragments ,, ,, an adult male.
4. Calculus removed from the male urethra.
5. Calculus ,, ,, ,,
6. Calculus ,, ,, ,,
7. Calculus ,, ,, ,,
8. Calculus ,, by lithotomy from a male aged 10 years.
9. Calculus ,, ,, ,, ,, 5 ,,
10. Two calculi ,, ,, ,, 8 ,,
11. Calculus ,, ,, ,, 3 ,,

12. Half of a calculus removed by lithotomy from a male.
13. Half ,, ,, ,, aged 13 years.
14. Half ,, ,, ,, ,, 8 ,,
15. Half ,, ,, ,, ,, 6 ,,
16. Calculus ,, ,, ,,
17. Calculus ,, ,, ,, ,, 6 ,,
18. Calculus ,, ,, ,, ,, 11 ,,
19. Half ,, ,, ,, ,, 7 ,,
20. Half ,, ,, ,,
21. Half ,, ,, ,, ,, 16 ,,
22. Half ,, ,, ,, ,, 16 ,,
23. Half ,, ,, ,, ,, 4½ ,,
24. Half ,, ,, ,, ,, 9 ,,
25. Half ,, ,, an adult.
26. Calculus removed by dilatation of urethra from female aged 8 yrs.
27. Calculus removed by lithotomy from a male aged 10 years.
28. Half of a calculus removed by lithotomy from a male aged 7 yrs.
29. Half ,, ,, ,, 4 ,,
30. Calculus ,, ,, ,, 14 ,,
31. Half ,, ,, ,, 2½ ,,
32. Calculus ,, ,, ,, 35 ,,
33. Half ,, ,, ,, 9 ,,
34. Half ,, ,, ,, 35 ,,
35. Calculus removed by lithotomy from an adult.
36. Half ,, ,, a male aged 5 yrs.
37. Half ,, ,, ,, 5 ,,
38. Half ,, ,, ,, 7 ,,
39. Half ,, ,, ,, 6 ,,
40. Half ,, ,, ,, 9 ,,
41. Calculus ,, ,, ,, 27 ,,
42. Calculus ,, ,, ,,
43. Calculus ,, ,, ,, 9 ,,
44. Half ,, ,, ,, 7 ,,
45. Calculus ,, ,, ,, an adult.
46. Half ,, ,, a male aged 32 ,,
47. Half ,, ,, ,, 5 ,,
48. Calculus ,, ,, ,,
49. Half ,, ,, ,, 8 ,,
50. Calculus ,, ,, ,, 14 ,,
51. Calculus removed by dilatation of urethra from a girl.
52. Calculus ,, ,, same patient as preceding.
53. Half of calculus removed by lithotomy from a male aged 6 yrs.
54. Calculus ,, ,, ,, 14 ,,
55. Half ,, ,, ,, 11 ,,
56. Half ,, ,, ,, 31 ,,
57. Calculus ,, ,, ,, 26 ,,
58. Half ,, ,, ,, 15 ,,
59. Half ,, ,, ,, 16 ,,
60. Half ,, ,, ,, 24 ,,
61. Calculus ,, ,, ,, 16 ,,
62. Calculus ,, ,, ,,
63. Half ,, ,, ,, 11 ,,
64. Calculus ,, ,, a young man.
65. Half ,, ,, a male aged 51 ,,
66. Half ,, ,, ,, adult.
67. Half ,, ,, ,, 60 ,,
68. Calculus ,, ,, a lad.
69. Calculus ,, ,, a male adult.

4066. Oxalate of Lime Calculus from the Ureter.

495. A calculus of an elongated oval form, measuring one inch by nine-sixteenths, and weighing seventy-five grains. Attached to the surface are a number of little rounded nodules, following more or less regular lines from apex to apex, and resembling the projections on a "Palliser" shot. It is chiefly composed of oxalate of lime.

From the body of a man aged 69, who died in the Hospital, of cerebral hæmorrhage. It was found impacted in the lower end of the left ureter, which it completely obstructed. The urinary passages above it were greatly dilated.

Post-Mortem and Case Book. 1874. No. 2.

4067. Renal Calculus, of Lithic Acid.

Half is shown, weighing a drachm and three quarters.

Presented by Mr. CHARLES HAWKINS.

4068. A Number of Minute Calculi, from the Prostate Gland, weighing altogether six grains.

Presented by Mr. CHARLES HAWKINS.

4069. Pulmonary Calculus.

378 *a.* A mass of calcareous matter, about the size of a small bean, expectorated.

No reference.

4070. Gall-stone, weighing seventy-five grains.

496. Removed from the body of the late Lord Canning.

Presented by Mr. ROUSE.

4071. Gall-stone.

408 *a.* A gall-stone, the size of a small walnut, which gave rise to serious symptoms of intestinal obstruction. Recovery ensued on its being passed per anum.

Presented by Dr. DICKINSON and Dr. GAGE-BROWN.

4072. "Bezoar Stone."

55 *a.* From a wild boar.

The following analysis was furnished by the late Mr. Moore, Demonstrator of Physiological Chemistry to St. George's Hospital:—Ash, phosphate of lime, with a trace of sulphate, 4 parts; organic matter, 96 parts. Total, 100 parts. Organic matter:—lithofellic acid, 3 parts; uric acid, a trace; woody fibre, etc, 97. Total, 100.

Presented by Mr. PRESCOTT HEWETT.

4073. A Tracheotomy Tube, after Five Years and a Half Continuous Use.
475 a.

The whole of the outer tube has been eroded and destroyed, nothing of it remaining but the shield that lay outside the trachea. About half of the inner tube is destroyed, and what remains is greatly thinned.

Removed from a man aged 32, admitted into the Hospital for an attack of bronchitis. Tracheotomy had been performed about five years and a half before, in the Hospital, for syphilitic laryngitis, and the patient had worn the tube constantly since.

After its removal, the wound in the throat contracted, and respiration was carried on with perfect freedom through the larynx.

Medical Cases. 1864. No. 166. 1869. No. 1196. *Path. Soc. Trans.* Vol. xxi., p. 416. *Brit. Med. Jour.* 1864, Vol. ii, p. 646.

4074. A Piece of Rabbit-bone, Impacted in the Larynx.
475 b.

A piece of rabbit-bone, apparently the spinous process of a vertebra with one of the laminæ attached.

Extracted by forceps from the larynx of a child aged 2, on December 4, 1873. The day before, while eating stewed rabbit, the child had suddenly choked and become livid. A chemist, to whom he was taken, was said to have felt a piece of meat in the throat, and pushed it down the gullet with his finger. The breathing, however, continued laborious and stridulous. Emetics giving no relief, chloroform was administered, and a digital examination made. The piece of bone was felt at the upper opening of the larynx. The child was discharged quite well ten days later.

Surgical Cases. 1873. No. 1908.

4075. A Screw, Impacted in the Air-passages, and Spontaneously Expelled through the Glottis after Thirty-three Days.
475 c.

A "button-screw" three-quarters of an inch in length.

Lancet. 1876. Vol. ii, p. 391.

Presented by Dr. SPITTA.

4076. A Plumstone, lodged in the Right Bronchus.
475 d.

The stone was expelled from the right bronchus of a boy, aged 10, who had "swallowed" it forty-seven days before. The boy was admitted into the Hospital under Mr. Stirling, the third day after the accident, and tracheotomy performed on the fifth; but no attempt was then made to reach the stone. On the following day the tube which

had been inserted into the trachea was removed, and the wound kept open by bent hair-pins. During the operation of securing the pins, the stone appeared at the wound, but receded before it could be grasped. Suspension by the feet and slapping the back were then tried without success. On the next day, the position of the foreign body, at the orifice of the right bronchus, was determined by means of a probe; and a rod, the end of which could be bent to a right angle by a screw, was inserted. The stone was dislodged, but not extracted. Immediately after, intense dyspnœa set in, followed by violent coughing. The wound being then dilated by dressing-forceps, the stone was driven out. Recovery was rapid.

Surgical Cases. 1879. No. 1564.

4077. A Shawl-pin, Spontaneously Expelled from the Pharynx
473 a. after Eleven Months' residence.

A globular glass head, the size of a pea, with three-quarters of an inch of rusty and blood-stained shaft attached to it, eaten away to a point at the other end; and an inch and a half of the lower part of the shaft, including the point, in a similar state.

The pin slipped, head-foremost, down the throat of a boy aged 19, on March 13, 1876. The head was suddenly coughed up on February 8, 1877, and the point an hour later. During the interval, the patient suffered from harsh, dry cough, with occasional paroxysms, and pricking sensations in the right side of the neck, near the cricoid cartilage, aggravated by the recumbent posture. At one time, he complained of pain only near the right clavicle. Six weeks before the pin was coughed up, a painful swelling appeared at the seat of the pricking sensation, gradually diffusing from the jaw to the root of the neck. It subsided without, apparently, any discharge of matter; and had quite disappeared a week before the expulsion of the pin.

Path. Soc. Trans. Vol. xxviii, p. 120.

Presented by Dr. DUNBAR.

4078. A Piece of Lead, weighing five ounces and a half, from
490. the Stomach.

The patient, a man aged 29, fell from the roof of a house while engaged in lead-stealing; and sustained a compound fracture of the leg. He died of pyæmia nineteen days later. He appeared to suffer no inconvenience from the presence of the piece of lead in the stomach, where it was found after death.

Post-Mortem and Case Book. 1872. No. 164.

4079. A Palate-Piece of India-rubber, with Two Incisor Teeth
473 c. attached, which was accidentally swallowed, and was Passed by the Rectum after five days.

The patient was treated at the Hospital as a casualty, and directed to eat bread and hard-boiled eggs. No symptoms occurred.

1880.

4080. Needle Impacted Near the Humerus: Grooving of the
473 b. Bone.

The articular end of the humerus, showing a grove an inch long, with blunt edges, just above the coronoid fossa. It is deepened in two places, as though the point of the needle had lodged in two places at different times. Portions of a broken needle, found in connection with the groove, are shown also.

From a subject (female) in the dissecting-room. 1879.

4081. A Piece of Umbrella-Rib, three inches and a half long,
491. which remained in the dorsum of a Boy's Foot from September 1871 to February 1872.

The boy walked about the whole time, and suffered only trifling inconvenience.

Presented by Mr. Geo. Pollock.

4082. A Cast-Iron Hat-Peg, part of which was Removed from
494. the Orbit.

The hat-peg is in two pieces, one comprising the scutcheon and a small portion of the shaft; the other, three inches and three-eighths in length, including the rest of the shaft and the head.

The latter portion was removed from the right orbit of a man aged 73, by Mr. Clarke of Gloucester. It was not clear how long it had rested there, but it was probably between ten and twenty days. The patient had fallen downstairs upon the peg, which entered the orbit at the inner angle of the eye, and then broke off short. He recovered from the operation without an unfavourable symptom.

Six months later, he was examined by Mr. Brudenell Carter, who found at the site of the conjunctival wound a small excrescence, from which extended a conical patch of vascularity. The excrescence created a slight epiphora, which was the only inconvenience that the patient suffered.

It appeared probable from the history that the point of the peg had entered the left cerebral hemisphere.

Ophthalmic Review. Vol. i, p. 337.

Presented by Mr. Brudenell Carter.

XX.

ENTOZOA.

4083. Tænia Solium.
16 *a*. *Presented by* Dr. ALDIS.

4084. Tænia Solium.
16 *b*. Expelled after administration of oil of male fern. The "head" is attached.

4085. Tænia Solium.
16 *c*. Expelled after administration of oil of male fern. The "head" is attached.

4086. Ascaris Lumbricoides.
4 *b*. *Presented by* Dr. ALDIS.

4087. Ascaris Lumbricoides.
4 *a*. Fifty-three ascarides.

Passed, under treatment by santonin, by a child aged 3, a patient in the Hospital. Twenty-one were passed on the second day of treatment, seven on the third, one on the fourth, four on the fifth, two on the sixth, seven on the seventh, ten on the eighth, and the last on the eleventh. Two had been passed before treatment commenced.

The child was admitted with paralysis of the legs and the right arm, which greatly lessened after expulsion of the ascarides.

Lancet. 1866. Vol. ii, p. 723.

4088. Sclerostoma Duodenale (Dochmius Duodenalis), Male and Female.

Presented by Dr. T. F. P. MCCONNELL, of the Medical College, Calcutta.

4089. Acephalocyst Hydatid.
15 *a*. Expelled from a suppurating hydatid cyst of the abdominal wall, in a boy aged 5.

Lancet. 1867. Vol. i, p. 391.

4090. Cysticercus Cellulosæ.
21. From the body of a man aged 63, who died in the Hospital, of pericarditis. The cysticercus shown lay beneath

the pia mater in a sulcus separating two of the right frontal convolutions. Another was found on the surface of the left occipital lobe.

Post-Mortem and Case Book. 1879. No. 183.

4091. Filaria Bronchialis, from the Porpoise.
20. *Presented by* Dr. JOHN W. OGLE.

4092. Filaria Medinensis (Guinea-Worm).
14 a. No history.
Presented by Assistant-Surgeon E. F. BROCKMAN, of the General Hospital, Madras.

XXI.

DRAWINGS.

4093. Osteo-myelitis of the Femur, after Amputation.
55 a. Femoral Vein from the same subject. (Preparation No. 3468.)

Water-colour. GEORGE BISHOPP. 1866.

4094. The Lower End of the Femur, from a case of Excision of
55 b. the Knee. (Preparation No. 3532.)

Water-colour. GEORGE BISHOPP.

4095. A Man Four Months after Fracture of the Cervical Ver-
55 c. tebræ.

Photograph.

A man aged 23, admitted into the Hospital after a fall of ten feet from a scaffold on to the top of the head. Partial loss of power in the limbs was observed. Though no crepitus was detected, a fulness on the right side of the neck, and a corresponding depression on the left side, opposite the third vertebra, afforded evidence of fracture of that bone. Its spinous process was driven in, and could scarcely be felt. After four months in the recumbent position, the patient was able to get about with a crutch, but the left leg dragged as he walked.

Surgical Cases. 1867. No. 1852.

4096. Clubbed Fingers, in a case of Phthisis.
55 *d.*
Photographs.

A child aged 6½, a patient under Dr. Whipham at the West London Hospital in 1867, with signs of softening tubercle at the apex of the left lung and of consolidation in that of the right. Cough had been present for three years; copious expectoration and profuse night-sweats for two years. The child had always been delicate, and had "fallen away" greatly after weaning. The fingers had been clubbed as long as the mother could remember. The palms of the hands measured two inches across, the clubbed finger-tips from half to three-quarters of an inch. The middle finger in each hand measured two inches in length. The condition improved under treatment; but the child was eventually lost sight of.

4097. Advanced Hip-joint Disease: The Femur and Os Innominatum.
Photographs.

No reference.
Presented by Mr. J. Gregory Smith.

4098. Necrosis of the Skull, after a Burn (Preparation No. 3484).
Water-colour. Drewitt.

4099. Destruction of one of the Mitral Valves, from an Abscess
67 *a.* within it. (Preparation No. 3609.)
Water-colour. Reginald Thompson.
Presented by Dr. Reginald Thompson.

4100. Atheroma and Calcification of the Aorta and Heart-
65 *a.* Valves.
Water-colour.

No reference.

4101. Fatty Degeneration of the Heart.
67 *b.* Water-colour.

No reference.

4102. Ulcerative Endocarditis, which gave rise to Embolism
58 *a.* (Preparation No. 3312).
Water-colour. Reginald Thompson. 1864.

4103. Varicose Veins.
64 *a.* Water-colour.

No reference.

4104. Varicose veins.
64 *b*. Water-colour.
No reference.

4105. Varicose Veins and Ulcer.
64 *c*. Water-colour.
No reference.

4106. "Varicose Ulcers".
64 *d*. Water-colour.
No reference.
The last four presented by Mr. J. GREGORY SMITH.

4107. Hydrocephalus, in a Child aged Three Months.
82 *a*. Water-colour. WESTMACOTT. 1873.

4108. Meningocele (Preparation No. 3711).
85 *b*. Pencil, tinted. WESTMACOTT. 1866.
Medical Cases. 1873. No. 256; with further illustrations.

4109. Laceration of the Brain, from Fracture of the Skull.
85 *c*. Water-colour. GEO. BISHOPP. 1868.
Post-Mortem and Case Book. 1868. No. 104.

4110. Extravasation of Blood into the Spinal Cord (Preparation No. 3761).
85 *d*. Water-colour. GEO. BISHOPP. 1868.

4111. Chronic Meningitis, in a Case of Syphilitic Disease of the Bones of the Skull (Preparation No. 3487).
85 *e*. Water-colour. TUSON.

4112. Enteric Fever: Enlargement of the Solitary Glands.
103 *a*. Water-colour. TUSON.
Post-Mortem and Case Book. 1868. No. 336.

4113. Tuberculosis of the Rectum (Preparation No. 3845).
103 *b*. Water-colour. TUSON.

4114. Stomach from a Case of Carbolic Acid Poisoning.
103 *f*. Water-colour. WESTMACOTT. 1873.
About an ounce and a half of the acid was taken. Death occurred in forty minutes.
Post-Mortem and Case Book. 1873. No. 34.

4115. Hydatid Cyst in the Liver, containing Blood-Clot.
103 *g*. Water-colour. TUSON.
No reference.

4116. Large Granular Kidney (Preparation No. 3901).
110 *a*. Water-colour. WESTMACOTT. 1877.

4117. Lardaceous Kidney.
115 *a*. Water-colour. TUSON.
Post-Mortem and Case Book. 1867. No. 233.

4118. Tuberculosis of the Kidney and Ureter (Preparation
115 *b*. No. 3929).
Water-colour. TUSON.

4119. Encephaloid Carcinoma of the Kidney.
115 *c*. Water-colour. TUSON.
Post-Mortem and Case Book. 1871. No. 196.

4120. Multiple Growth in the Kidney.
115 *d*. Water-colour. TUSON.
No reference.

4121. Tubercle of the Kidney: Early Stage.
Water-colour. JOSEPH PERRY. 1828.
No reference.

4122. Tubercle of the Kidney: Early Stage.
Water-colour. JOSEPH PERRY. 1829.
No reference.

4123. Tubercle of the Kidney.
115 *e*. The left kidney is represented.
Water-colour. FISCHER.
Post-Mortem and Case Book. 1880. No. 379.

4124. Smooth Contracted Kidney.
Water-colour. REGINALD THOMPSON.
Post-Mortem and Case Book. 1868. No. 8.

4125. Extensive Infarction of the Spleen.
The spleen is greatly enlarged: it weighed six pounds.
Water-colour. GRAYLING.
Post-Mortem and Case Book. 1882. No. 144.

4126. Impervious Condition of the Left Ureter: the Right
117 *a*. Plugged at its Extremity by a Calculus (Preparation No. 3905.)
Water-colour. WESTMACOTT. 1865.
Presented by Dr. BAGSHAWE.

4127. Tuberculosis of the Testis: Early Stage (Preparation
125 *a*. No. 3958).
Water-colour. WESTMACOTT. 1878.

4128. Disease of the Ovary.
Water-colour. GASKOIN.
No reference.

4129. Ectropion Vesicæ, in the Female.
Water-colour. GASKOIN.
No reference.

4130. Phagedænic Ulcer on the back of the Calf.
Water-colour.
Presented by Dr. BARNES.

4131. Ulceration of the Thigh, after a Burn, in Process of
152 *b.* Treatment by Skin Grafting.
Water-colour. WESTMACOTT. 1870.
The treatment was successful.
Surgical Cases. 1870. No. 83.

4132. Sloughing of the Prepuce, leading to Perforation of the
151 *a.* Skin, through which the Glans protrudes.
Water-colour. WESTMACOTT. 1873.
The sloughing was consequent on gonorrhœa.
Surgical Cases. 1872. No. 1579.

4133. Cicatrix after Removal of the Tumour shown as Pre-
152 *c.* paration No. 4025.
Water-colour. F. DAWTREY DREWITT.

4134. Urticaria.
152 *a.*
Pencil, tinted.
Presented by Dr. JOHN W. OGLE.

The following twenty-six water-colour drawings, Nos. 4135-4160, *were presented by* Dr. BARNES.

4135. Purpura Hæmorrhagica.

4136. Herpes.

4137. Favus.

4138. Eczema.

4139. Pemphigus.

4140. Acne Punctata.

4141. Acne Rosacea.

4142. Sycosis Menti.

4143. Sycosis Menti.

4144. Tinea Granulata.

4145. Psoriasis.

4146. Psoriasis.

4147. Psoriasis Palmaris.

4148. Psoriasis Scrofulosa (? Syphilitica).

4149. Psoriasis Nummulata (?).

4150. Psoriasis Nummulata.

4151. Psoriasis Annulata.

4152. Lichen Syphiliticus.

4153. Rupia.

4154. Lupus.

4155. Lupus.

4156. Lupus.

4157. Epithelioma of the Nose; "of the Alps".

4158. Anomalous Eruption occurring in a Lady at each Pregnancy, commencing and ceasing with Lactation.

4159. Anomalous Eruption, partly Lichenous, partly Vesicular.

4160. Fungating Tumour of the Skin of the Back.
H. S. NEWTON. 1827.

4161. Ichthyosis.
148 *b.* Pencil, tinted. WESTMACOTT. 1866.

4162. Ichthyosis.
148 *a.* Photographs. The same patient as No. 4161.

4163. Pigmented Papilloma.
148 *f.* Water-colour. WESTMACOTT. 1880.
Medical Cases. 1880. No. 201.

4164. Pigmented Papilloma.
148 *d.* Photograph of the same patient as No. 4163, taken when he was a patient under Mr. John Morgan at the Hospital for Sick Children in 1877.

4165. Pigmented Papilloma.
148 *c.* Photograph, taken at the same time as No. 4164.

4166. Pigmented Papilloma.
Tinted lithograph, rare. 1841.
Presented by Mr. J. GREGORY SMITH.

4167. Elephantiasis of the Penis.
Pencil, coloured. SOLOMON COHEN. 1801.
Presented by Dr. BARNES.

4168. Elephantiasis of the Genitalia.
148 *c.* Photograph.
No reference.

4169. Elephantiasis of the Scrotum.
148 *a.* Photograph.
No reference.

4170. Carcinoma (? Sarcoma) of the Orbit and Face.
170 *a.* Water-colour. WESTMACOTT. 1874.
A woman aged 55. The growth was of only three months' date, as far as was known, at the time that the drawing was made. The greater part of the tumour was subsequently removed by the knife, and chloride of zinc paste applied to the surface thus exposed.
Surgical Cases. 1874. No. 255.

4171. Tumour of the Forehead.
181 *e.* Photograph.
The tumour was of seven years' date. Its nature was uncertain.
Surgical Cases. 1868. No. 959.

4172. Tumour of the Forehead.
181 *e.* Photograph. The same patient from another point of view.

4173. Carcinoma of the Scapula (Preparation No. 3513).
181 *f*. Photograph. Front view.

4174. Carcinoma of the Scapula.
181 *g*. Photograph. The same patient as No. 4173. Back view.

4175. Carcinoma of the Axilla, after Removal of the Scapula
181 *c*. (Preparation No. 3538).
Water-colour. GEORGE BISHOPP. 1866. The same patient as Nos. 4173 and 4174.

4176. Orbital Tumour, Fibro-Sarcoma (Preparation No. 4034).
Photograph.

4177. Cystic Sarcoma of the Lower Jaw.
Photograph.
Surgical Cases. 1880. No. 1064.

4178. Periosteal Sarcoma of the Lower End of the Femur.
Water-colour.
No reference.

4179. Fungating Tumour, Amputated.
Water-colour. JOSEPH PERRY. 1828.
No reference.

4180. Fungating Tumour, Amputated.
Water-colour. JOSEPH PERRY. 1828.
No reference.

4181. Pelvic Tumour, Involving the Uterus.
Water-colour.
No reference.

4182. Congenital Tumour of the Scalp.
181 *l*. Water-colour. WESTMACOTT. 1873.
A girl, 8 years old, a patient in the Hospital.
Surgical Cases. 1873. Nos. 330 and 881.

4183. Congenital Tumour of the Scalp.
181 *p*. Water-colour. T. J. ENGLISH. 1873.
The same growth at a later period.
Presented by Mr. ENGLISH.

4184. Congenital Tumour of the Scalp.
181 *p*. Water-colour. T. J. ENGLISH. 1874.
The same patient after numerous applications of the actual cautery.
Presented by Mr. ENGLISH.

4185. Carcinomatous Tumours of the Skin of the Lower Extremity.
181 *j*.
Water-colour. WESTMACOTT. 1872.
Post-Mortem and Case Book. 1873. No. 22.

4186. Epithelioma of the Thigh.
181 *k*.
Water-colour. WESTMACOTT. 1873.
The whole length of the thigh is one mass of fungating ulcer.
Post-Mortem and Case Book. 1873. No. 28.

4187. Epithelioma of the Upper Lip.
Water-colour. WESTMACOTT. 1865.
No reference.

4188. Fatty Tumour of the Foot (Preparation No. 4016).
181 *b*.
Photograph.

4189. Fatty Tumour of the Foot (the same as No. 4188).
181 *b*.
Photograph.

4190. Molluscum Fibrosum.
181 *m*.
Photograph.
Removal of the large pendulous mass was accomplished.
Surgical Cases. 1872. No. 1698.
Presented by Mr. POLLOCK.

4191. Molluscum Fibrosum.
181 *m*.
Photograph. The same patient as No. 4190. Back view.

4192. Molluscum Fibrosum.
181 *n*.
Photograph of woodcut of the same patient in *Path. Soc. Trans.*, vol. xvi, p. 269.
Presented by Mr. POLLOCK.

4193. Molluscum Fibrosum.
181 *o*.
Photograph of engraving in Virchow's *Die Krankh. Geschw.*, i, 325.

4194. Stump after Amputation at the Wrist.
Water-colour. WESTMACOTT. 1869.

4195. Stump after Amputation of the Fingers.
Water-colour. WESTMACOTT. 1869.

4196-7. Stump after Amputation at the Hip.
181 *h*, *i*.
Photographs.
Post-Mortem and Case Book. 1866. No. 133. *Path. Soc. Trans.* Vol. xvii, p. 217. *St. George's Hospital Reports.* Vol. i, p. 138.

4198. Contraction of the Cicatrix of a Burn.
181 *d.* Photograph.
A cast is shown in Series XXII (No. 4250).
1868.

4199. British Surgery in India.
181 *r.* Photographs. Various subjects.
Presented by Mr. POLLOCK.

4200. British Surgery in India.
181 *s.* Photographs. Various subjects.
Presented by Mr. POLLOCK.

XXII.

CASTS AND MODELS.

4201. Dislocation of the Sternal End of the Right Clavicle
82 *a.* Forwards.
Made and presented by Mr. AUGUSTUS WINTERBOTTOM *and* Mr. W. H. BULL.

4202. Dislocation of the Head of the Femur into the Obturator
38 *a.* Foramen: False Joint.
No reference.

4203. Thigh and Leg of a Ricketty Child.
20 *a.* No reference.

4204. Thigh and Leg of a Ricketty Child.
20 *b.* No reference.

4205. Hand, affected with Osteo-arthritis.
18 *a.* No reference.

4206. Disease of the Knee-Joint: Dislocation.
38 *b.* No reference.

4207. Disease of the Knee-Joint: Dislocation.
38 *c.* No reference.

4208. Distortion of the Great Toe-Joint from Tight Boots.
38 *d.* No reference.

4209. Disease of the Knee: Exposure of the Condyles of the
38 *c.* Femur.

Wax.

No reference.

4210. Contraction of the Palmar Fascia.
49 *a.* No reference.

4211-5. Talipes Varus.
61 *a–e.* No references.

4216-7. Talipes Valgus.
61 *f, g.* No references.

4218-20. Talipes Calcaneus.
61 *h, i, j.* No references.

4221-6. Talipes Equinus.
61 *k–p.* No references.

4227-30. Talipes Equino-Varus.
61 *q–t.* No references.

4231-3. Talipes Calcaneo-Valgus.
61 *u, v, w.* In 4232 and 4233 four toes only exist.
No references.

4234-6. Flat Foot.
61 *x, y, z.* No references.

4237. Knock-Knee.
61 *aa.* No reference.

4238. Talipes Varus.
72 *j.* No reference.

4239. Talipes Varus, not Congenital.
72 *f.* From a girl, aged 20, whose foot had been perfectly straight until two years and a half before her admission into the Hospital. Since then, in consequence of a strain, it had gradually assumed the position seen in the cast. Under treatment she recovered completely.
Surgical Cases. 1866. No. 1987.

4240. Wry-Neck.
61 *bb.* No reference.

4241-3. Curvatures of the Spine.
71a,b,c. No reference.

4244. Deformity of the Hip, Simulating that of Disease of the
14 b. Hip-Joint.

Except that the muscles are not wasted, the deformity produced by hip-joint disease is exactly simulated.

From a girl aged 13, a patient in the Hospital, with symptoms of hip-joint disease, which disappeared almost altogether under anti-hysterical treatment. Under ether, it was found that the joint could be moved freely.

Surgical Cases. 1877. Nos. 313, 1370.

Presented by Mr. WINTERBOTTOM.

4245. Extensive Spasmodic Lateral Curvature of the Spine,
72 c. with Peculiar Contractions, and Deformity of the Limbs.

The complete cast of a woman, aged 25. Examining, first, the spine, it is found to possess a very acute lateral curvature, affecting the whole of the dorsal region; the upper portion of the spine being bent considerably to the right side, and at the same time rotated outwards and backwards, so that the inferior angle of the scapula is approximated very considerably to the right sacro-iliac joint. In consequence of this peculiar deformity of the spine, the cast rests, when placed on a flat plane, on the left buttock and right shoulder, whilst the loins form an arch raised at least six inches from the bed, as in opisthotonos; at the same time the lower ribs of the right side overlap considerably the crest of the ilium, so much so, in fact, that the lowest point of the ribs is scarcely two inches from the great trochanter. The right side of the chest is extremely compressed from before backwards, measuring at the lower part certainly not more than three inches in an antero-posterior direction. The viscera contained in the thorax have evidently been pushed over to the right side, as there is considerable bulging of the chest below the nipple on this side. The head is drawn slightly forwards and to the left side, the left sterno-mastoid being extremely prominent. The pelvis is very oblique, the right anterior superior spinous process of the ilium being nearly on the same level with the lowermost ribs on the left side. The left upper extremity is thrown forwards and outwards from the chest, the forearm is flexed at a right angle with the arm, the hand is thrown backwards on the forearm by the extensor muscles, and the fingers are flexed upon the thumb, which lies across the palm. The right arm is thrown backwards from the

shoulder, and the inner condyle of the humerus is in contact, or nearly so, with the right tuber ischii, in consequence of the spinal curve; the forearm is acutely flexed on the arm; the hand is turned backwards on the forearm and the fingers are in the same condition as on the other side. The left thigh is flexed and drawn inwards in front of the right, and is rotated outwards so that the surface of the patella looks inwards and outwards; the leg is flexed at a right angle with the thigh, and the foot is extended somewhat on the leg; the arch of the foot is entirely destroyed, and the foot is drawn outwards as in valgus. The right thigh is drawn over to the left side behind the left; the leg is slightly flexed, and the foot is drawn upwards and inwards as in a state of extreme varus; so that, supposing the cast to be placed in the erect position, the foot would rest on the head of the astragalus.

The patient from whom this most extraordinary cast was taken, was seized with spasmodic movements about a year after birth. These movements increased, and contractions at length became permanent—contractions which in degree and number have perhaps never been exceeded in one body. The patient was 25 years of age when she died. She could not express a word, even "yes" or "no", or make any intelligible sign; but could understand what was said to her, and uttered some few sounds. The senses were unaffected. The sphincters retained their power. There was not the slightest power of voluntary motion beyond, perhaps, slight movement of the fingers. No post-mortem examination could possibly be obtained.

Presented by Mr. Brodhurst.

4246. Enteric Fever; Ulcers of the Intestine.
127 c. Wax.

Made and presented by Mr. H. B. Tuson.

4247. Malformation and Malposition of the Left Kidney.
72 a. The left kidney is situated immediately below the bifurcation of the aorta. It is discoidal in shape, and the hilus is at its left border. It is rather larger than normal, but natural in structure. It is supplied by four arteries,—a small branch from the aorta just above its bifurcation, a rather larger one from the left common iliac, and two, of which one only is actually visible in the cast, from the right common iliac. The last-named vessel is pushed outwards, and partly hidden by the kidney. The left renal vein

passes from the hilus in a curved direction to the right border of the kidney, lying in a deep groove; then upwards, to the right of the vena cava, to open into that vessel on its right side, just below the corresponding vein from the right kidney. It crosses in front of the right spermatic artery. A small accessory vein ascends, in front of the left common iliac artery, to open into (probably) one of the lumbar veins. The ureter is short, and leads directly into the bladder.

The kidney is not surrounded by any fat, but was fixed in its position by firm connective tissue.

From a subject in the dissecting-room, in the Winter Session 1877-78.

Presented by Mr. WALTER DUNN.

4248. Encephaloid Carcinoma of an Undescended (Right) Testicle.
74 *a*.

Taken on May 29, 1864, when the disease was of about ten months' date.

4249. The Same.
74 *b*.

Taken on July 27, 1866, after the patient's death. The patient was then 34 years of age.

St. George's Hospital Reports. Vol. ii, p. 67.

Presented by Mr. GEO. FREDERICK HODGSON.

4250. Contracted Cicatrix of a Burn.
72 *h*.

In front of the neck there is a dense cicatrix extending from the chin to the sternum, which entirely prevents the chin from being raised, and causes the mouth to be constantly open, with dribbling of saliva.

From a child aged 7, a patient in the Hospital in the year 1868. (See Photograph No. 4198).

4251. Elephantiasis of the Foot.
19 a.

No reference.

4252. Lipoma of the Foot (Preparation No. 4016).
136.

Wax.

4253. Another Model of the Same.
136.

Wax.

Presented by Mr. TAMPLIN.

4254. Diffused Lipoma of the Foot. (Preparation No. 4015).
72 *g*.

4255. The Corresponding Foot to that shown as No. 4254.
72 *g*.

4256. Ectropion Vesicæ.
73 a. From an adult male. In the inguinal region on either side is an unusual prominence, suggestive of a hernia.
No history.
Presented by Mr. George Harrison.

4257. Congenital Deformity of the Hand.
72 d. The first and second fingers are wanting, the metacarpal bones forming small extremities; the second being longer than the first. The ring and little fingers are webbed together, and flexed at the second phalangeal joint, not permitting of much extension. The nails are distinct. The thumb is bent at its extremity, the nail being clubbed and placed at the tip of the finger; it could be bent quite back along the radial side of the forearm.
From a boy, aged 7, of strumous temperament. The other hand was similarly deformed. The feet also presented a peculiar deformity (Preparation No. 4266).

4258. Union of the Terminal Phalanges of the Index, Middle, and Ring Fingers: Webbing of all the Digits.
72 i. The nails of the three middle digits are also united in one piece. The thumb and little finger admitted of separation by operation. The other digits could not be so separated, in consequence of the united terminal phalanges.
Presented by Mr. Haward. July 1880.

4259. Deformity of the Hand.
72 h. No reference.

4260. Congenital Malformation of the Middle Finger of the Left Hand.
86 a. From a child aged 9. The malformed finger was removed by Mr. Pick.
Presented by Mr. Charles Winterbottom.

4261. Malformation of the Hand.
21 a. No reference.

4262. Malformation of the Hand.
21 b. No reference.

4263. Malformation of the Hand.
21 c. No reference.

4264. Malformation of the Hand.
21 *d.* No reference.

4265. Hypertrophy of the Fingers.
86 *b.* The hypertrophy affects in various degrees the thumb, the index and the middle finger of the left hand, the index, middle, and ring fingers of the right.

Wax.

No reference.

4266. Congenital Deformity of the Foot.
72 *e.* The three middle toes are wanting, and the foot presents a deep cleft in this situation, in which are the remains of the metatarsal bones, inclined to the outer side of the foot. The extremities of the two remaining toes, the great and little, are turned towards each other.

From the same case as No. 4257. The deformity was the same on both sides. The boy had the power of grasping anything with considerable force between these segments.

Surgical Cases. 1866. No. 1942.

4267. Congenital Deformity of the Foot.
72 *c.* No reference.

4268. Congenital Deformity of the Leg, by Curving of the
72 *j.* Tibia and Fibula about an inch and a half above the Malleoli, simulating Talipes.

This deformity was remedied by division of the bones, and union in a straight line.

Presented by Mr. HAWARD. July 1880.

4269. Excision of the Astragalus.
15 *a.* No reference.

4270. Syphilitic Teeth.
67 *a.* A cast of the teeth, in a case of inherited syphilis.

Presented by Mr. CHARLES WINTERBOTTOM.

4271. Colloid Carcinoma of the Spleen.
127 *a.* From a specimen in University College Museum.

Cirrhosis of the Liver.
Carcinoma of the Liver.
Sarcoma of the Liver.
Fungus Hæmatodes of the Liver.

Six models in wax.

Made and presented by Mr. H. B. TUSON. 1882.

4272. Lupus, Early and Later Stages.
127 *b*. Clot in the Brain.
Tubercular Ulceration of the Intestine, with Enlargement of the Mesenteric Glands.
Ulcerated Openings into the Arch of the Aorta.
Seven models in wax.
Made and presented by Mr. H. B. TUSON. 1882.

XXIII.

MISCELLANEOUS.

4273. Dry Gangrene of both Lower Extremities.
xvi, 109 *a*. The feet and lower portions of the legs are shown. They are completely mummified. The soft parts have shrunk from the bones of the legs, leaving them bare and dry to within a short distance of the ankle.
Removed by amputation from a Hindoo woman, aged 15½ years, in the eighth month of her first pregnancy. The gangrene was almost precisely symmetrical, and extended in either leg to within three inches of the knee-joint. The line of demarcation was well defined. The affection had begun with small spots on the feet three months previously. The stumps soon healed after the operation, and a well-formed child was born at the natural period. The patient was seen alive six years later.
Pathological Society's Transactions. Vol. xxvi, p. 245.
Presented by Dr. THEODORE DUKA.

4274. Cuticle of the Fingers and the Palm of the Hand, Exfoliated in one piece after Scarlatina.
Presented by the late Sir RANALD MARTIN, K.C.B.

4275. Hydrocephalic Skull.
No reference.

4276. Hydrocephalic Skull.
No reference.

4277. Hydrocephalic Skull.
No reference.

4278-9. Portions of Two Fingers Bitten Off by a Man of Unsound
xvi, 109, 110 Mind from his own Hands.

The patient, aged 22, was a prisoner in Millbank. He had some years previously suffered some injury to the forefinger of the right hand. This preyed upon his mind, and he threatened if the finger were not cut off, that he would bite it off; on May 3, 1869, he carried his threat into execution, and, on the 9th of July following, he bit off another finger from the left hand.

Presented by Mr. J. H. P. WILSON.

4280. A Thumb, which was Embedded in a Glacier for Forty
xvi, 108. Years.

In the year 1862, Mr. F. Snowden, in crossing the Glacier des Bossons, found a man's right arm protruding from the ice. The thumb (that shown in the Preparation) had been torn off at its base, and was lying close by. The arm was pretty confidently identified as that of M. Tairrez, one of the guides who had been swept away at the top of the glacier, forty years before, while making the ascent of Mont Blanc with Dr. Hamel. The appearance of their remains was not unexpected, as Dr. Forbes had predicted, from his calculation of the movements of glaciers, that some portion of the bodies would probably be found in that year.

The following is from *L'Abeille de Chamonix* of September 21, 1862.

"Nous avons à rouvrir encore une fois les archives funèbres de nos glaciers.

"Vendredi 12 Septembre, MM. J. Snowden, Miss Snowden et M. Herbert Saunders, accompagnés par le guide Alfred Couttet, aperçurent, en traversant le glacier des Bossons, quelques lambeaux de vêtements, des touffes de cheveux blonds, et à quelques pas de ces lambeaux un bras droit humain mutilé à la naissance du poignet et cassé un peu au-dessous de l'humerus.

"Ce membre, que les voyageurs, tenant à l'authenticité de leur découverte, ont bien voulu nous présenter, était recouvert entièrement de ses chairs, souples, malléables et à peine livides. Il avait été rejeté le matin même par la crevasse au bord de laquelle il venait d'être recueilli.

"Parmi les fragments de vêtements, se trouvent des morceaux de sac de peau recouverte encore de poils bruns, des débris de verre à bouteille et un bouchon de liége ayant conservé la teinte rosée du liquide et jusqu'à l'odeur vineuse bien caractérisée.

"Un des lambeaux de vêtements conserve un bouton en fer fondu à surface rayonée avec une petite rosette au milieu, entièrement semblable à un de ceux qui adhéraient aux hardes retrouvées l'année dernière.

"Ce bras appartient évidemment à un des cadavres dont le crâne a été rejeté l'année précédente.

"Le divers procès-verbaux dans lesquels on a soigneusement con-

staté, au fur et à mesure des découvertes, la nature des fragments anatomiques retrouvés, constatent que trois bras droits ont été successivement rejetés par le glacier. C'est une preuve assez certaine que les trois victimes de l'évènement de 1820 n'ont pas été séparées par les évolutions de leur cercueil de glace et que l'ouverture d'une fissure voisine restituera très-probablement dans un délai rapproché les autres parties de ces cadavres si prodigieusement conservés depuis quarante deux ans."

Presented by Mr. F. SNOWDEN, through Dr. JOHN W. OGLE.

4281. Transplantation of the Spur of a Capon.

The head of a capon. The place of the comb is occupied by a spur, transplanted from one foot, and successfully rooted.

The capon was observed in the village of Minchinhampton, Gloucestershire, in the year 1875, by Mr. John Colebrooke, who obtained possession of and killed the bird. The transplantation had been performed by a Dutchman, not a medical man, some years previously.

Presented by Mr. JOHN COLEBROOKE.

4282. Stump after "Teale's Amputation" of the Leg.

xvi, 104. The operation was performed in the Hospital by Mr. Prescott Hewett, on a man aged 33, for strumous disease of the tarsus, October 30, 1862. The patient died on December 30, of tubercular encephalitis.

Post-Mortem and Case Book. 1863. No. 1.

4283. Stump after "Teale's Amputation" of the Thigh.

xvi, 105. From the body of a patient who died in the Hospital. Amputation had been previously performed for disease of the knee-joint.

No reference.

4284. Stump after "Syme's Amputation" of the Foot.

xvi, 111. The operation was performed on the right side for disease of the tarsus. The patient, a man aged at that time 65 years, died in the Hospital two years and a half later, of phthisis.

A sinus, leading to necrosed bone, is seen about two inches and a half above the stump, which is nearly healed.

Post-Mortem and Case Book. 1868. No. 305.

INDEX.

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